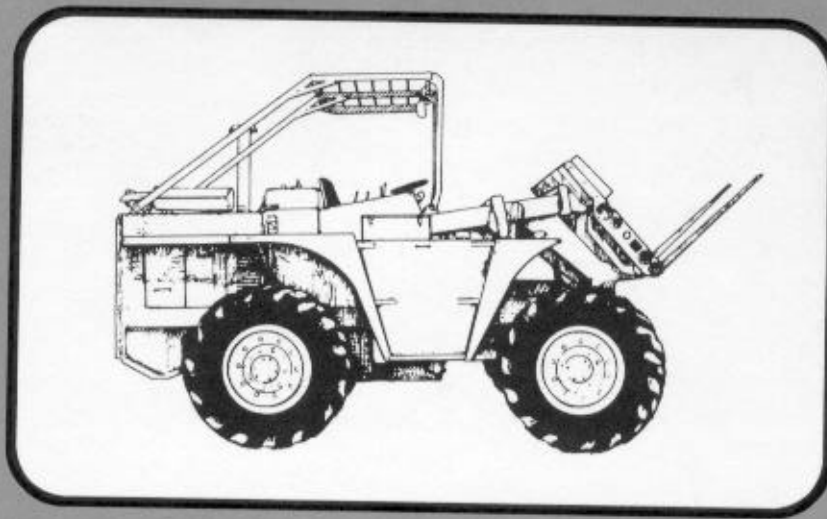


AIRDROP OF SUPPLIES AND EQUIPMENT: RIGGING FORKLIFT TRUCKS



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**HEADQUARTERS
DEPARTMENT OF THE ARMY
DEPARTMENT OF THE AIR FORCE**



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

REPLY TO
ATTENTION OF

ATCD-SL (70-1f)

21 Oct 96

MEMORANDUM FOR DEPUTY CHIEF OF STAFF OPERATIONS AND PLANS,
400 ARMY PENTAGON, ATTN: DAMO-FDL, WASHINGTON
DC 20310-0400

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

1. References:

a. Message, HQDA, DAMO-FDL, 231825Z Apr 96, subject: QM FAA Results.

b. Memorandum, HQ TRADOC, ATCG, 29 Jul 96, Army Airdrop Capabilities Assessment.

2. At the 29 Mar 96 QM FAA briefing to the Director of Army Staff, the decision was reached to revisit the Army's decision to "shelf" Low Altitude Parachute Extraction System (LAPES) (reference 1a).

a. Reference 1b, solicited CINCs input for their positions on LAPES and assessments of airdrop capabilities. The CINCs responses will be used to chart the direction and role for airdrop in the 21st century.

b. Based on the responses received (enclosure), there is no strong support for LAPES airdrop capability at this time. The consensus for the airdrop capabilities is to continue support for current Low Velocity Airdrop System (LVAD), develop a 500-foot LVAD and further explore Advanced Precision Aerial Delivery System (APADS).

3. Further, we will continue to maintain a range of airdrop capabilities to support all contingencies throughout the Army. The results of the Army Airdrop Capabilities Assessment also will be incorporated into the Operational Concept for Aerial Delivery Operations and Improved Cargo Aerial Delivery Capability Mission Needs Statement being developed by the Quartermaster Directorate of Combat Developments, U.S. Army Combined Arms Support Command (CASCOM).

4. The HQ TRADOC POC is MAJ Higgins, Airborne Airlift Action Office, ATCD-SL, E-mail: higginsn@emh10.monroe.army.mil, DSN 680-2469/3921, datafax DSN 680-2520.

ATCD-SL

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

FOR THE DEPUTY CHIEF OF STAFF FOR COMBAT DEVELOPMENTS:

Encl

JOHN A. MANDEVILLE

Colonel, GS

Director, Combat Service Support

CF:

USACASCOM (ATCL-CG/ATCL-QC/ATCL-MES)

USAQMC&S (ATSM-CG/ATSM-ABN/FS)

USANRDEC (SSCNC-UT/AMSSC-PM)

| ORGANIZATION | LAPES | LVAD | 500' LVAD | APADS | SPTS/ NOT SPEC |
|---------------------|--------------|-------------|----------------------|--------------|---------------------------|
| USSOCOM | | X | X | X | |
| EUCOM | | | | | X |
| CENTCOM | | X | X | | |
| FORSCOM | | X | X | X | |
| TRANSCOM | | | | | X |
| SOUTHCOM | X | | | X | |
| VIII ARMY | | | | | X |
| ACOM | | | | | X |

USSOCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but supports LVAD as well as APADS.

EUCOM: Draft memorandum specifically states that the command support the need for a low level airdrop capability. However, memorandum summarizes that the specific capability is not important as to have a capability to meet the required mission/threat profile.

CENTCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but support both current LVAD and 500-foot LVAD airdrop capabilities.

FORSCOM: 1st Endorsement specifically states that the command does not support LAPES airdrop capability, however supports LVAD, 500-foot LVAD and APADS.

TRANSCOM: Memorandum does not specifically address any airdrop capability as it talks to the 21st century requiring the full spectrum of tactical delivery methods.

SOUTHCOM: Memorandum specifically supports LAPES and APADS airdrop capabilities for their command.

VIII ARMY: E-Mail note for VIII Army states that the command has no input to the assessment as their plans call for a limited employment of airdrop.

ACOM: Sent request for input on 30 Sep 96. Received verbal response on 16 Oct 96 stating command is indifferent on the specific capability received.



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-3000

REPLY TO
ATTENTION OF

6 SEP 1995

ATCD-SL (70-1f)

MEMORANDUM FOR

Major General Thomas W. Robison, Commander, U.S. Army Combined
Arms Support Command and Fort Lee, Fort Lee, VA 23801-6000
Major General Robert K. Guest, Commander, U.S. Army Quartermaster
Center and School, Fort Lee, VA 23801-5030

SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly.

1. References:

a. Message, HQ TRADOC, ATCD-SL, 100930Z Jan 95, subject:
LAPES.

b. OVVM Note, HQ USACASCOM, 30 March 95, subject: TRADOC
Disassembly of LAPES.

2. The U.S. Army and other services recently have concurred that
LAPES will be terminated, as this capability is no longer required
as a viable wartime contingency airdrop option. However,
Headquarters, Department of the Army (DA), Deputy Chief of Staff
for Operations and Plans, has agreed that LAPES technology will be
shelved, and all specialized equipment preserved for possible
future use.

3. Take the necessary steps to terminate training and leader
development concerning LAPES operations. Major General Guest's
questions regarding the disassembly of LAPES (enclosed) with
following guidance will be utilized:

a. "Does the U.S. Army Quartermaster Center and School
(USAQMC&S) continue to publish LAPES procedures in their joint
field manual (FMs)/technical order manuals?" "Do we publish the
LAPES procedures that have been written but not been printed yet?"
Publishing LAPES procedures in all joint publications, Army FMs,
regulations, etc., will be discontinued and addressed in the next
revision of the aforementioned documents. Concurrently, all LAPES
procedures that have been written and not printed will not be
published.

6 SEP 1995

ATCD-SL

SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly

b. "Do we keep LAPES in our programs of instruction (POIs)?"
"Do we teach LAPES to other services and our allies?" The
USAQMC&S will remove LAPES procedures from PCI and cease teaching
LAPES to other services and/or allies.

c. "What do we teach to folks that have LAPES equipment in
their war reserves?" All instruction concerning LAPES procedures
will be discontinued whether LAPES equipment is located in units
or in war reserves.


d. "What is the DA/TRADOC guidance on disposition of unit,
depot, and war reserves LAPES equipment?" All LAPES equipment in
war reserves and depot should be preserved with the exception of a
few items that can be utilized in other existing airdrop capabili-
ties. Specifically, the Type V airdrop platforms and attitude
control bars of the LAPES system are being utilized to augment
current Low Velocity Airdrop Systems (LVADS) loads.

e. "What is the guidance to U.S. Army Test and Experimenta-
tion Command on force development test and experimentation certi-
fication of LAPES loads?" The certification of all LAPES loads at
the Airborne Special Operations Test Directorate will be
redirected toward testing and certification of LVADS loads.

4. HQ TRADOC POC is CPT Higgins or CPT Phillips, ATCD-SL, DSN
680-2469/3921, datafax DSN 680-2520.

FOR THE COMMANDER:

Encl



JOE N. BALLARD
Major General, GS
Chief of Staff

CF:
HQDA (DAMO-FDL)
CDR, NRDEC (SAFNC-UA)
CDR, FORSCOM (FCJ3-FC)
CDR, OPTEC (CSTE-CS, CSTE-OPM)
CDR, ATCOM (AMSAT-W-TD)
DIR, ABNSOTD (ATCT-AB)
HQ TRADOC (ATCD-L, ATCD-RM, ATDO-A, ATTG-IT)

Date and time 07/18/95 10:28:11

From: HIGGINSN--MON1
To: HIGGINSN--MON1

From: OPT NEIL HIGGINS, (AAACO), 680-2469
Subject: TRADOC "DISASSEMBLY" OF LAPES

* AIRBORNE AIRLIFT ACTION OFFICE *
* (AAACO) *

** Forwarding note from BRUNEAUN--MSGNAME 07/18/95 10:27 ***
received: from LEE-EMH2.ARM.Y.MIL by MONROE-EMH2.ARM.Y.MIL (12M VM SMTP V2R2)
with TOP; Tue, 18 Jul 95 10:27:22 EDT
received: from LEE1 by LEE-EMH2.ARM.Y.MIL (12M VM SMTP V2R2) with SMTP id 3547;
Tue, 18 Jul 95 10:29:34 EDT
Comments: Converted from PROPS to RFC822 format by PUMP V2.2X
Date: Tue, 18 Jul 95 10:29:26 EDT
From: NORMAN BRUNEAU <BRUNEAUN@LEE-EMH2.ARM.Y.MIL>
Subject: TRADOC "DISASSEMBLY" OF LAPES
To: "NEIL HIGGINS- AAACO " <HIGGINS@MONROE-EMH1.ARM.Y.MIL>

** Resending note of 06/30/95 09:23

From: LARRY MC MILLIAN AAA <MCMILLI@MONROE-EMH1.ARM.Y.MIL>
To: NORMAN BRUNEAU
Subject: TRADOC "DISASSEMBLY" OF LAPES

NEIL- HERE ARE THE QUESTIONS THAT MG GUEST WANTS DA/ TRADOC TO ANSWER RE LAPES, AS I UNDERSTAND HIS GUIDANCE. I HAVE DISCUSSED THESE W/ OUR ABN DPT. IF THESE QUESTIONS MAKE SENSE, GIVE ME AN "UP" BEFORE I FORMALLY SEND ANYTHING OUT. MG GUEST WANTS SPECIFIC GUIDANCE FM TRADOC ON LAPES, RESPONSE NEEDS TO BE CLEAR AND TO THE POINT. A LOT OF THIS WILL HINGE ON WHAT ACC PLANS TO DO W/ LAPES NOW THAT THE AIR STAFF HAS GIVEN THEM THE GREEN LIGHT TO KILL IT. IF THEY PLAN TO PLACE IT ON THE SHELF OR KEEP A LIMITED OR CONTINGENCY CAPABILITY, THAT WILL DRIVE YOUR ANSWER TO US, AT THIS POINT I THINK ACC WILL DO WHATEVER THE ARMY WANTS, AS THEIR PRIMARY CUSTOMER. I WILL NOT REHASH HOW THE ARMY DECIDED THEY DIDNT NEED LAPES. QUESTIONS FOLLOW:

DOES THE GMS CONTINUE TO PUBLISH LAPES PROCEDURES IN THEIR JOINT FM/TO MANUALS?
DO WE PUBLISH THE LAPES PROCEDURES THAT HAVE BEEN WRITTEN BUT HAVE NOT BEEN PRINTED YET?
DO WE REMOVE ALL LAPES PROCEDURES FROM ALREADY PUBLISHED MANUALS?
DO WE KEEP LAPES IN OUR POI?
DO WE TEACH LAPES TO OTHER SERVICES AND OUR ALLIES?
WHAT DO WE TEACH TO FOLKS THAT HAVE LAPES EQUIPMENT IN THEIR WAR RESERVES?
WHAT IS THE DA/TRADOC GUIDANCE ON DISPOSITION OF UNIT, DEPOT, AND WAR RESERVE LAPES EQUIPMENT?
WHAT IS THE GUIDANCE TO TEXCOM ON THE FUTE CERTIFICATION OF LAPES LOADS?

I KNOW THESE ARE TOUGH QUESTIONS, BUT THEY HAVE TO BE ASKED. HQ STAFFS CAN- NOT SIMPLY SAY "KILL IT" AND MOVE ON TO THE NEXT ISSUE. I DONT THINK WE ARE DOING OUR JOB IF WE LEAVE IT UP TO THE SCHOOLHOUSE TO INTERPRET SKETCHY GUIDANCE. THAT PLACES US IN THE POSSIBLE POSITION OF BEING ACCUSED OF NOT FOLLOWING ORDERS.

LISTE TALK.....NORM

TRAIL 2/47

SEP 11 1995 08:30AM CESSR FT MONROE VA

File 1

DEPARTMENT OF THE ARMY
QUARTERMASTER CENTER AND SCHOOL
1201 22D STREET
FORT LEE, VIRGINIA 23801-1601

ATSM-ABN-FS

15 Dec 96

MEMORANDUM FOR RECORD

SUBJECT: Airdrop Equipment Update


Reference:

- a. Phone conversation between CW4 Mahon, CASCOM and Dick Harper, Weapons System Management Office, Army Aviation Troop Command. Subject : sab
- b. Phone conversation between CW4 Mahon, CASCOM and Don Stump, Logistics Management Specialist, Office, Deputy Chief of Staff for Logistics. Subject. sab
- c. Phone conversation between CW4 Mahon, CASCOM and Chief Msgt Okraneck, Hqrs Air Combat Command. Subject sab
- d. msg dtg R 181348Z Feb 94. subject: FCIF item: Type II platforms, PEFTC and SL/CS for Air Force unilateral training

1. Based on information received from the references a-c above, the following update is provided per request ref c, above.

- a. The type II modular platform no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
- b. The Parachute Extraction Transfer Force Coupling (PEFTC) no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
- c. The metric platform interim rigging procedures are no longer valid as they apply to metric platforms. Those rigging procedures which have dual application with the type V platform are still valid for the type V platform.
- d. The static line connector strap (SL/CS) currently has limited application. Only those loads that specifically require this system are authorized use of this system. The SL/CS is not an across the board substitute for the Extraction Force Transfer Coupling (EFTC). These authorized loads are specific in nature and will normally be found in the special operations arena of airdrop loads. This system is not authorized for use IAW ref d, above.

2. For additional questions/information contact the undersigned at DSN 687-4733, Fax 3084.


John R. Mahon
CW4, USA
Senior Airdrop Systems
Technician

CHANGE
No. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
DEPARTMENT OF THE AIR FORCE
Washington, DC, 20 June 1997

**AIRDROP OF SUPPLIES AND EQUIPMENT:
RIGGING FORKLIFT TRUCKS**

This change adds the procedures for rigging the M271, 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop.

FM 10-531/TO 13C7-54-1, 2 July 1982, is changed as follows:

1. New or changed material is identified by a vertical bar (■) in the margin opposite the changed material.
2. File this transmittal page in front of the publication for reference purpose.
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Glossary- 1
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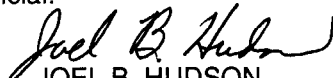
Insert pages

Cover 1
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5-1 through 5-50
Glossary-1
References- 1

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By Order of the Secretaries of the Army and the Air Force:

Official:



Handwritten signature of Joel B. Hudson in cursive script.

JOEL B. HUDSON
*Administrative Assistant to the
Secretary of the Army*
03519

DENNIS J. REIMER
*General, United States Army
Chief of Staff*

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CHANGE
NO. 1

HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 15 June 1992

AIRDROP OF SUPPLIES AND EQUIPMENT RIGGING FORKLIFT TRUCKS

This change adds the procedures for rigging the 4,000-pound and 6,000-pound capacity forklift truck on a type V platform for low-velocity and LAPE airdrop.

FM 10-531/TO 13C7-54-1, 2 July 1982, is changed as follows:

1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
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3-1 through 3-74
4-1 through 4-63
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References-1

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FIELD MANUAL
No. 10-531
TECHNICAL ORDER
No. 13C7-54-1

HEADQUARTERS
DEPARTMENT OF THE ARMY AND
DEPARTMENT OF THE AIR FORCE
Washington, DC, 20 June 1997

**AIRDROP OF SUPPLIES AND EQUIPMENT:
RIGGING FORKLIFT TRUCKS**

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PREFACE

SCOPE

This manual tells and shows how to prepare and rig the M4K and MHE-271, 4,000-pound forklift trucks and the 6,000-pound forklift truck for low-velocity airdrop from C-130 and C-141B aircraft. It is designed to be used by all parachute riggers.

USER INFORMATION

The proponent of this publication is HQ TRADOC. You are encouraged to report any errors or omissions and to suggest ways to make this a better manual. Army personnel, send comments on DA Form 2028 directly to:

Cdr
Aerial Delivery and Field Services Department
USA Quartermaster Center and School
1010 Shop Road
Fort Lee, Virginia 23801-1502

Air Force personnel, send your reports on AFTO Form 22 through:

Cdr
Headquarters
Air Mobility Command (AMC/DOTX)
402 Scott Drive, Unit 3AI
Scott AFB, Illinois 62225-5302

Air Force personnel in Special Operations Command, send your reports on AFTO Form 22 through:

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HQ AFSOC/DOXT
100 Bartley St., Suite 260
Hurlburt Field, Florida 32544-5273

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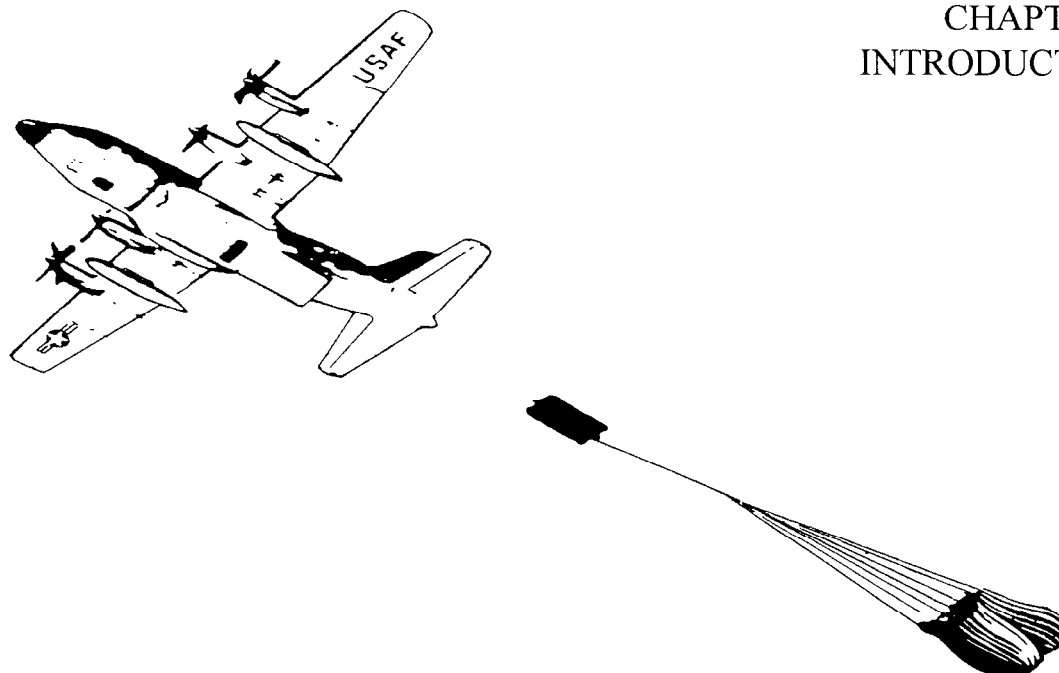
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Aerial Delivery and Field Services Department
USA Quartermaster Center and School
1010 Shop Road
Fort Lee, Virginia 23801-1502

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SA-ALC/TILDP
485 Quentin Roosevelt Road
Kelly AFB, Texas 78241-6421

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

CHAPTER 1 INTRODUCTION



1-1. Description of Item

This manual tells and shows how to rig the 4,000-pound and 6,000-pound capacity forklift trucks for low-velocity airdrop from a C-130, C-141B, and C-5 aircraft. Also included are procedures for rigging the forklift trucks for LAPE airdrop from a C-130 aircraft. This manual is designed for use by all parachute riggers.

1-2. Special Considerations

- a. These loads have dangerous material as defined by *AFJMAN 24-204/TM 38-250*.
- b. A copy of this manual must be available for the joint airdrop inspectors to use during the before and after loading inspection.

CHAPTER 3

RIGGING THE 4,000-POUND CAPACITY FORKLIFT TRUCK ON A TYPE V PLATFORM

Section I

LOW-VELOCITY AIRDROP

3-1. Description of Load

The 4,000-pound capacity forklift truck (Figure 3-1) is rigged on a 16-foot, type V platform for low-velocity airdrop. The forklift truck is rigged with three G-11B cargo parachutes. The unrigged vehicle weighs approximately 9,725 pounds, reducible to 9,320 pounds. Its length is 205 inches, reducible to 166 inches. Its height is 80 inches, reducible to 77 inches. Its width is 79 inches.

3-2. Preparing Platform

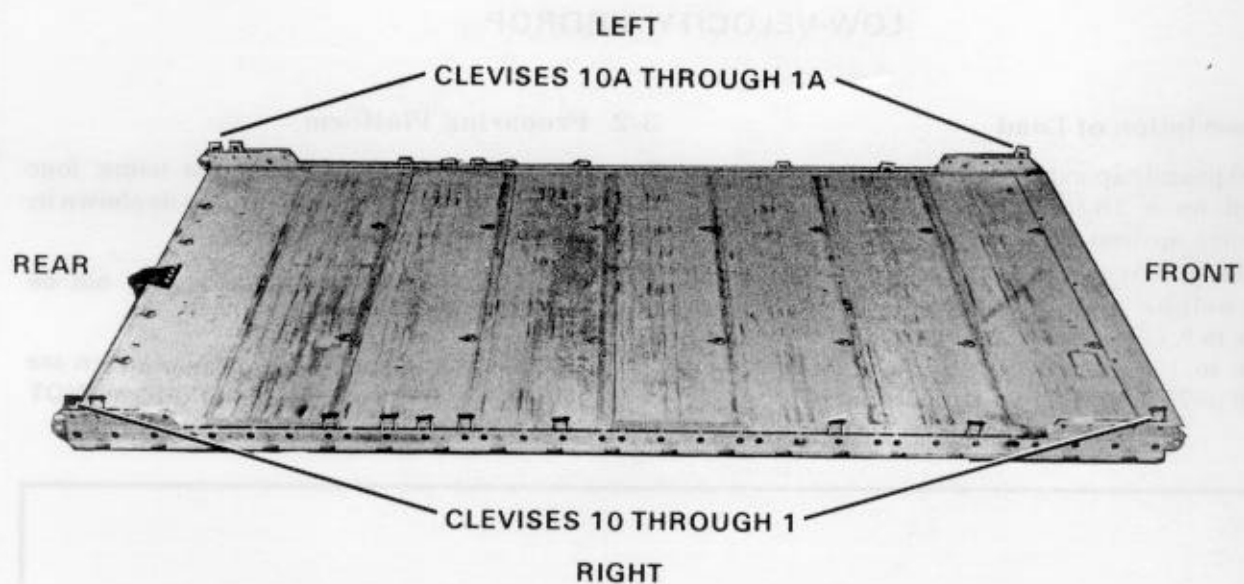
Prepare a 16-foot, type V platform using four tandem links and 20 clevis assemblies as shown in Figure 3-2.

Notes: 1. The nose bumper may or may not be installed.

2. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.



Figure 3-1. M4K, 4000-pound capacity forklift truck



Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P / TO 13C7-52-22.
2. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3 and on the rear of each platform side rail using holes 30, 31, and 32.
3. Install a clevis on bushing 1 on each front tandem link.
4. Starting at the front of each platform side rail, install clevises to bushing bolted on holes 6, 10, 18, 21, 22, 23, and 25.
5. Install clevises on bushings 3 and 4 on each rear tandem link.
6. Starting at the front of each platform side rail, number the clevises bolted on the right side from 1 through 10 and those bolted on the left side from 1A through 10A.

Figure 3-2. Platform prepared

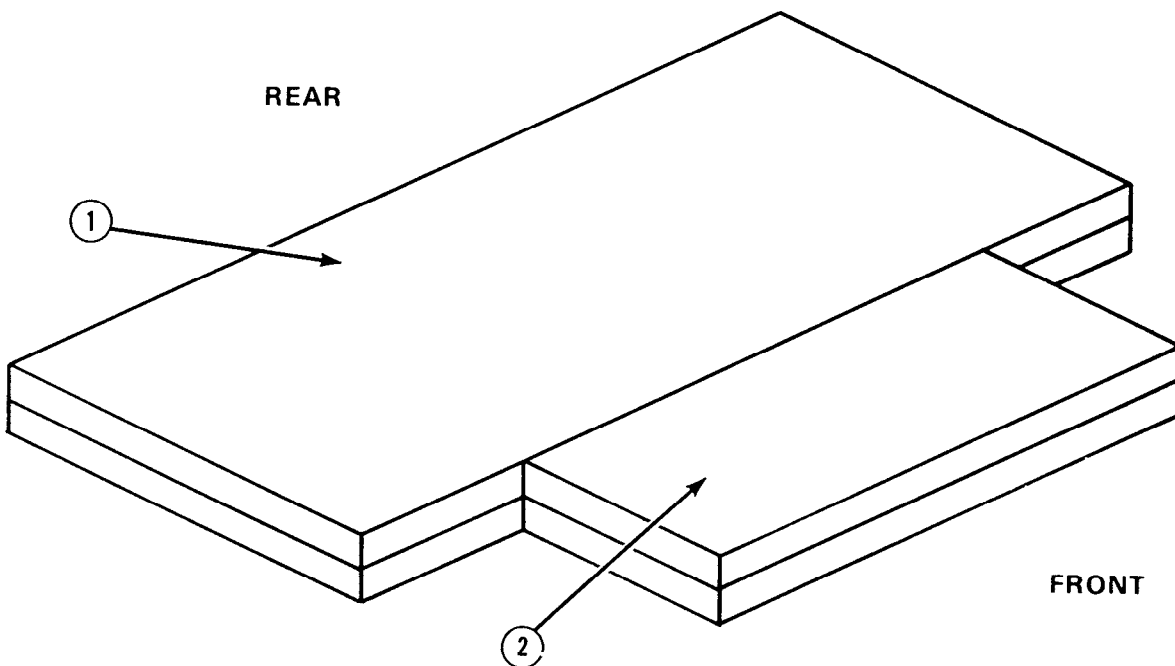
3-3. Preparing and Positioning Honeycomb Stacks

Use the materials in Table 3-1 to prepare three honeycomb stacks as shown in Figures 3-3, 3-4, and 3-5. Position the stacks on the platform according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-6.

Table 3-1. Materials required to build honeycomb stacks

| Stack Number | Pieces | Width (Inches) | Length (Inches) | Material | Instructions |
|--------------|--------|----------------|-----------------|---------------------|-----------------|
| 1 | 2 | 80 | 36 | Honeycomb | See Figure 3-3. |
| | 2 | 48 | 21 | Honeycomb | |
| | 8 | 18 | 28 | Honeycomb | |
| | 2 | 18 | 28 | 3/4-inch plywood | |
| | 4 | 12 | 14 | 3/4-inch plywood | |
| | 4 | 4 | 12 | 2- by 4-inch lumber | |
| | 3 | 42 | 10 | Honeycomb | |
| | 1 | 42 | 10 | 3/4-inch plywood | |
| | 4 | 10 | 10 | Honeycomb | |
| | 2 | 10 | 10 | 3/4-inch plywood | |
| | | | | | |
| 2 | 6 | 32 | 40 | Honeycomb | See Figure 3-4. |
| | 1 | 32 | 40 | 3/4-inch plywood | |
| | 1 | 32 | 17 | 3/4-inch plywood | |
| | 2 | 32 | 7 | 3/4-inch plywood | |
| | 2 | 4 | 12 | 2- by 4-inch lumber | |
| | | | | | |
| 3 | 2 | 80 | 36 | Honeycomb | See Figure 3-5. |
| | 2 | 36 | 18 | Honeycomb | |
| | 2 | 36 | 24 | Honeycomb | |
| | 8 | 9 | 24 | Honeycomb | |
| | 2 | 9 | 24 | 3/4-inch plywood | |
| | 3 | 42 | 10 | Honeycomb | |
| | 1 | 42 | 10 | 3/4-inch plywood | |
| | 4 | 10 | 10 | Honeycomb | |
| | 2 | 10 | 10 | 3/4-inch plywood | |
| | | | | | |

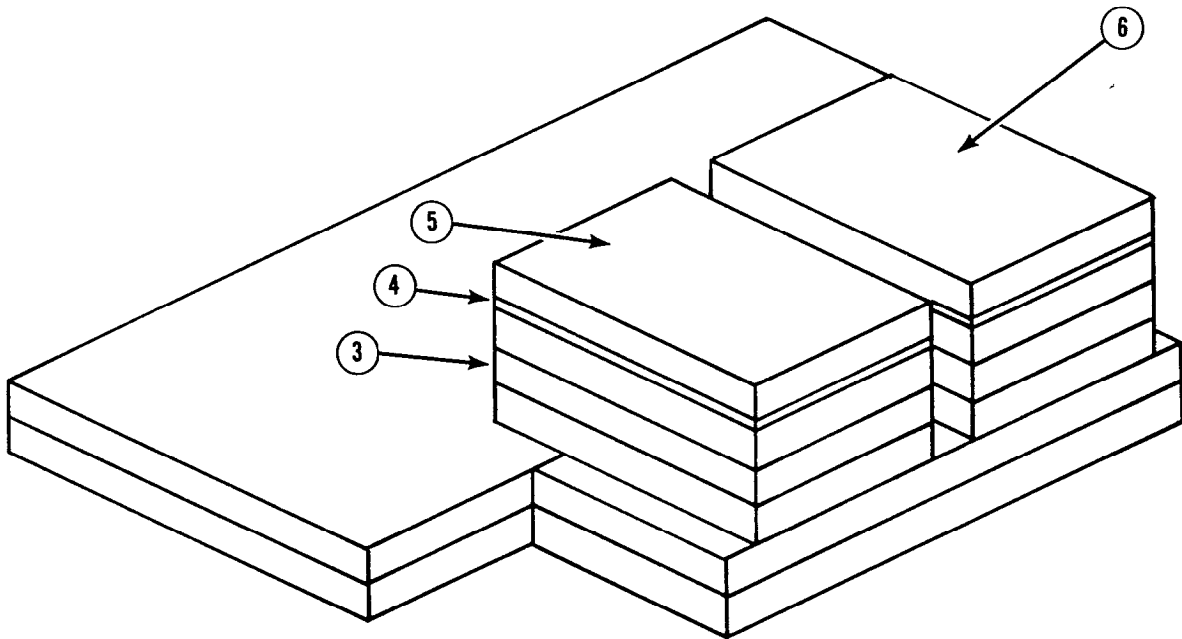
Note: This drawing is not drawn to scale.



- ① Place two 80- by 36-inch pieces of honeycomb as the rear base of the stack.
- ② Place two 48- by 21-inch pieces of honeycomb as the front base of the stack, centered against the front of the honeycomb placed in step 1.

Figure 3-3. Honeycomb stack 1 prepared

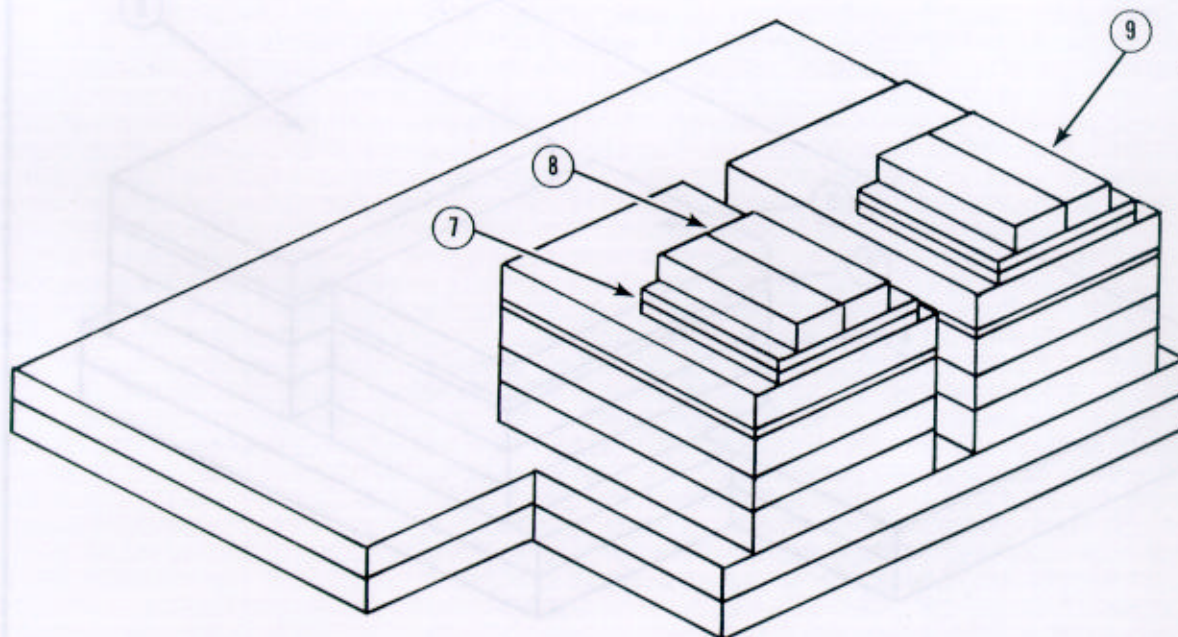
Note: This drawing is not drawn to scale.



- ③ Place three 18- by 28-inch pieces of honeycomb 3 inches in from the right side of the 48- by 21-inch honeycomb, and flush with the front of the base.
- ④ Place a 3/4- by 18- by 28-inch piece of plywood on top of the 18- by 28-inch pieces of honeycomb.
- ⑤ Place a 18- by 28-inch piece of honeycomb on top of the 3/4- by 18- by 28-inch plywood.
- ⑥ Repeat steps 3 through 5 for the left side.

Figure 3-3. Honeycomb stack 1 prepared (continued)

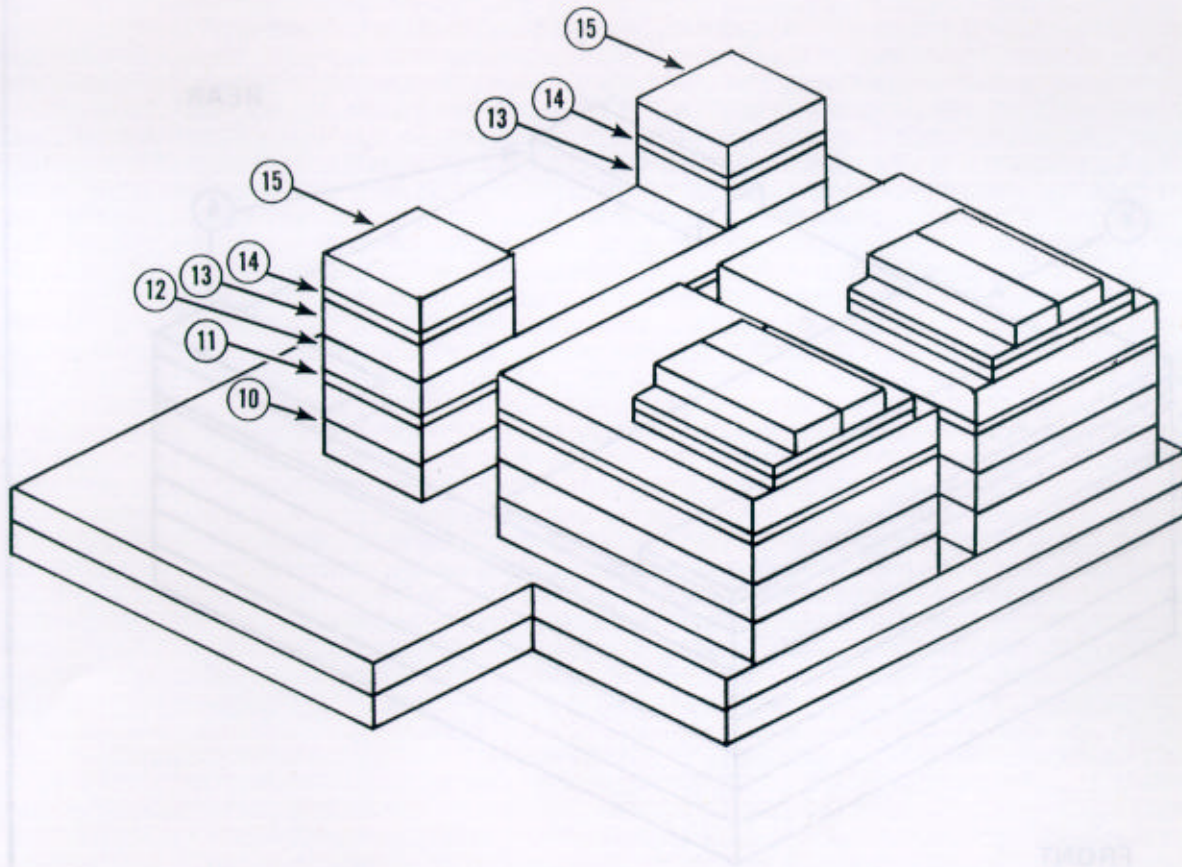
Note: This drawing is not drawn to scale.



- ⑦ Center two $\frac{3}{4}$ - by 12- by 14-inch pieces of plywood on top of the 18- by 28-inches of honeycomb flush with the front of the stack.
 - ⑧ Center two 2- by 4- by 12-inch pieces of lumber side by side on top of the $\frac{3}{4}$ - by 12- by 14-inch plywood.
- Note: Do not fasten the lumber to the plywood.
- ⑨ Repeat steps 7 and 8.

Figure 3-3. Honeycomb stack 1 prepared (continued)

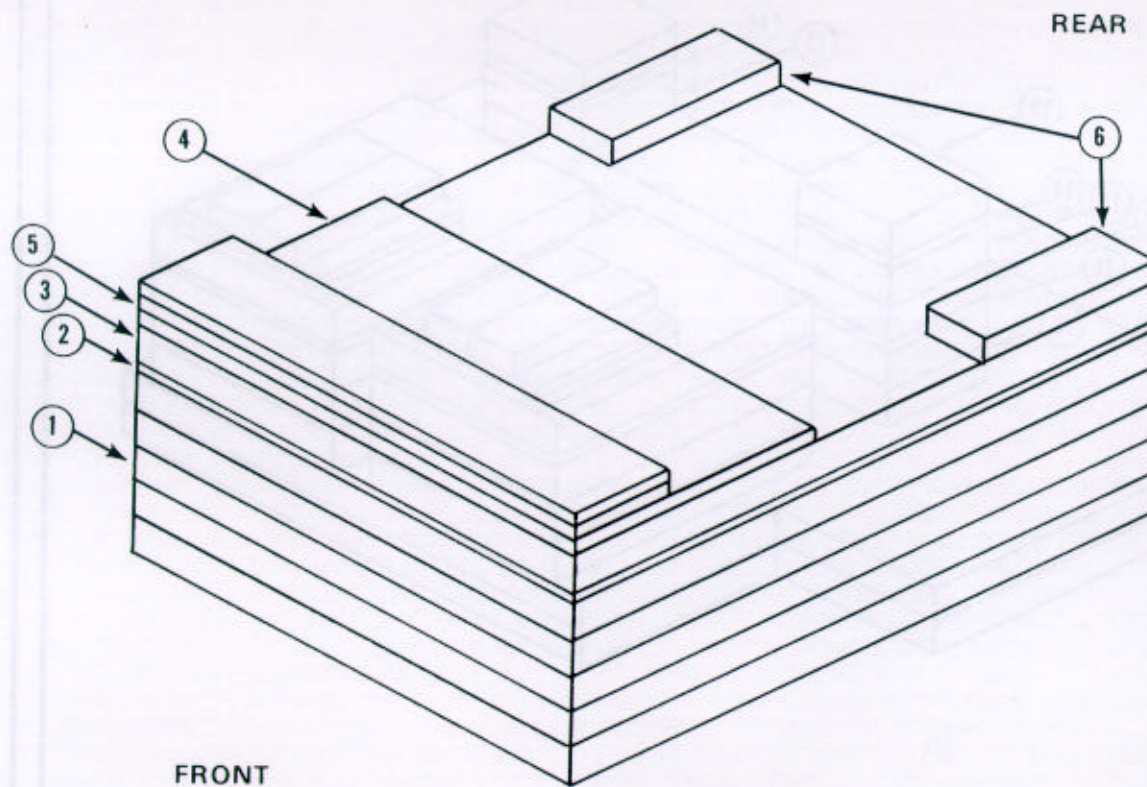
Note: This drawing is not drawn to scale.



- ⑩ Place two 42- by 10-inch pieces of honeycomb 12 inches from the rear of the base and 19 inches from the right and left sides.
- ⑪ Place a 3/4- by 42- by 10-inch piece of plywood on top of the 42- by 10-inch pieces of honeycomb.
- ⑫ Place a 42- by 10-inch piece of honeycomb on top of the 3/4- by 42- by 10-inch piece of plywood.
- ⑬ Place a 10- by 10-inch piece of honeycomb on top of each end of the 42- by 10-inch pieces of honeycomb.
- ⑭ Place a 3/4- by 10- by 10-inch piece of plywood on top of each 10- by 10-inch piece of honeycomb.
- ⑮ Place a 10- by 10-inch piece of honeycomb on top of each 3/4- by 10- by 10-inch piece of plywood.

Figure 3-3. Honeycomb stack 1 prepared (continued)

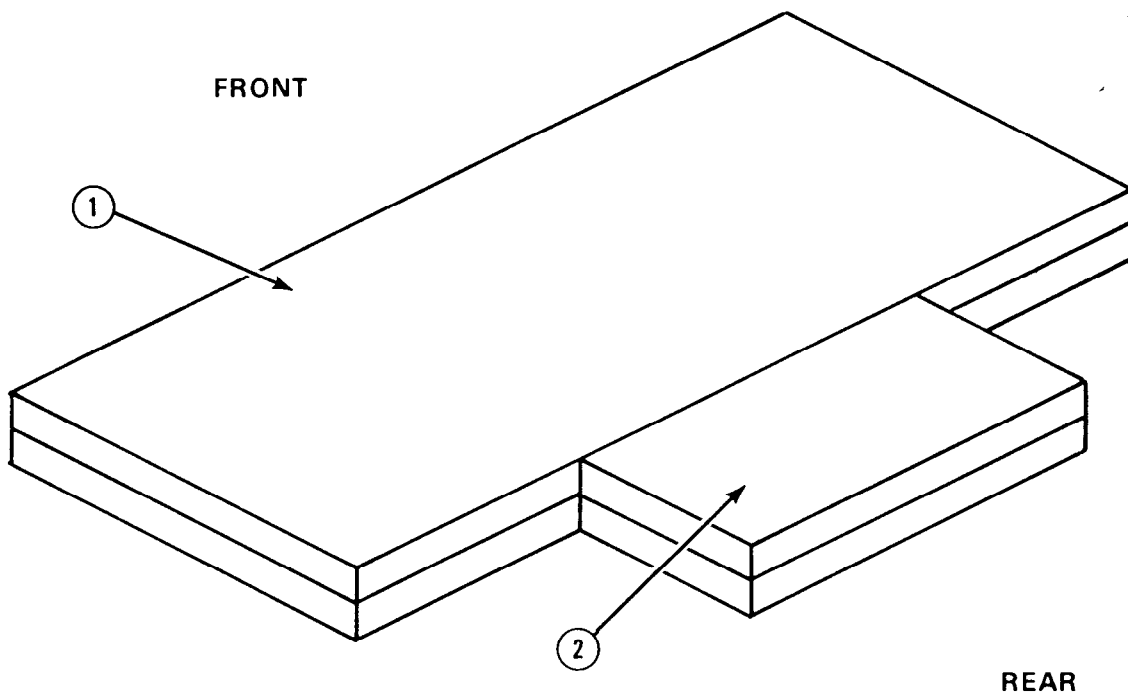
Note: This drawing is not drawn to scale.



- ① Place five 32- by 40-inch pieces of honeycomb as the base.
- ② Place a 3/4- by 32- by 40-inch piece of plywood on top of the fifth layer of honeycomb.
- ③ Place a 32- by 40-inch piece of honeycomb on top of the 3/4- by 32- by 40-inch piece of plywood.
- ④ Place a 3/4- by 32- by 17-inch piece of plywood on top of the sixth layer of honeycomb flush with the front of the stack.
- ⑤ Place two 3/4- by 32- by 7-inch pieces of plywood on top of the 3/4- by 32- by 17-inch plywood flush with the front of the stack.
- ⑥ Place one 2- by 4- by 12-inch piece of lumber on each rear corner of the stack.

Figure 3-4. Honeycomb stack 2 prepared

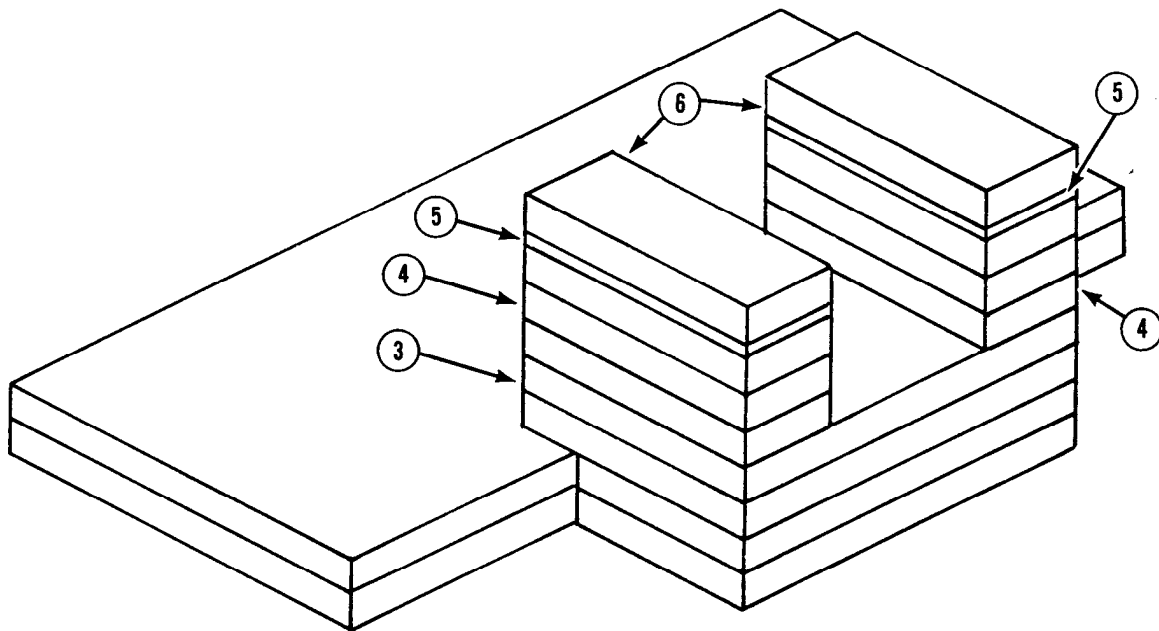
Note: This drawing is not drawn to scale.



- ① Place two 80- by 36-inch pieces of honeycomb as the front base of the stack.
- ② Place two 36- by 18-inch pieces of honeycomb as the rear base of the stack, centered against the rear of the honeycomb placed in step 1.

Figure 3-5. Honeycomb stack 3 prepared

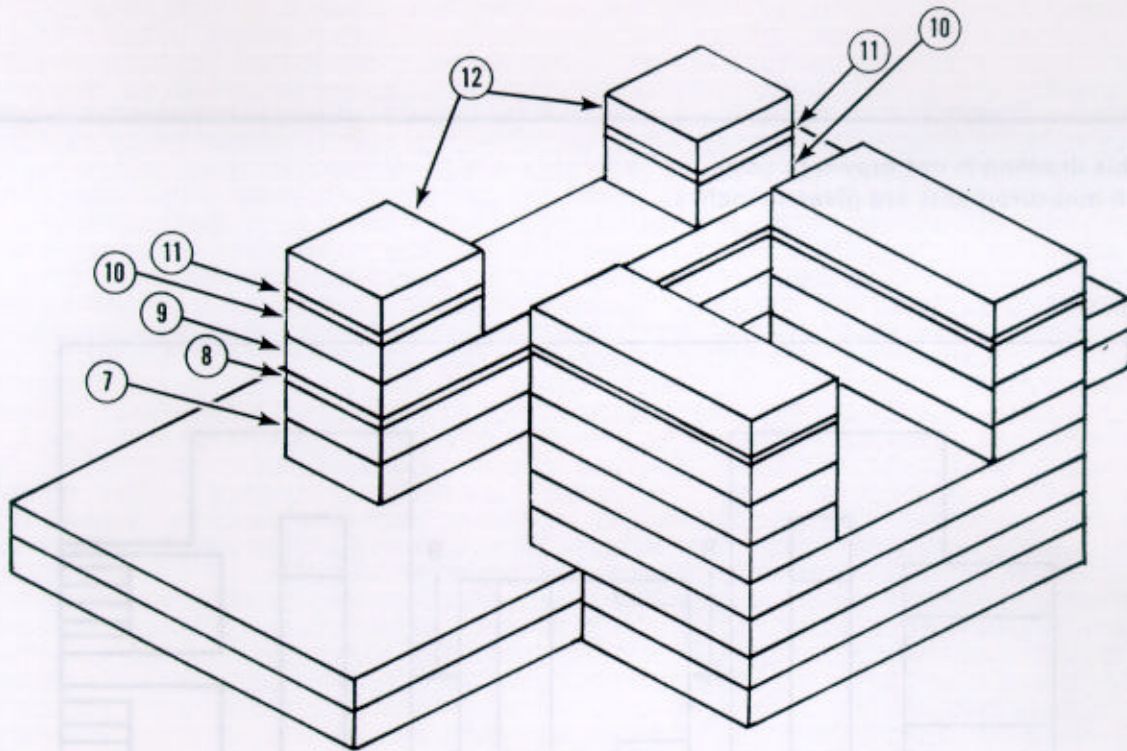
Note: This drawing is not drawn to scale.



- ③ Place two 36- by 24-inch pieces of honeycomb flush with the rear edge of the base.
- ④ Place three 9- by 24-inch pieces of honeycomb flush with the rear edge on each side of the stack.
- ⑤ Place a 3/4- by 9- by 24-inch piece of plywood on top of the 9- by 24-inch honeycomb on each side of the stack.
- ⑥ Place a 9- by 24-inch piece of honeycomb on top of each 3/4- by 9- by 24-inch piece of plywood.

Figure 3-5. Honeycomb stack 3 prepared (continued)

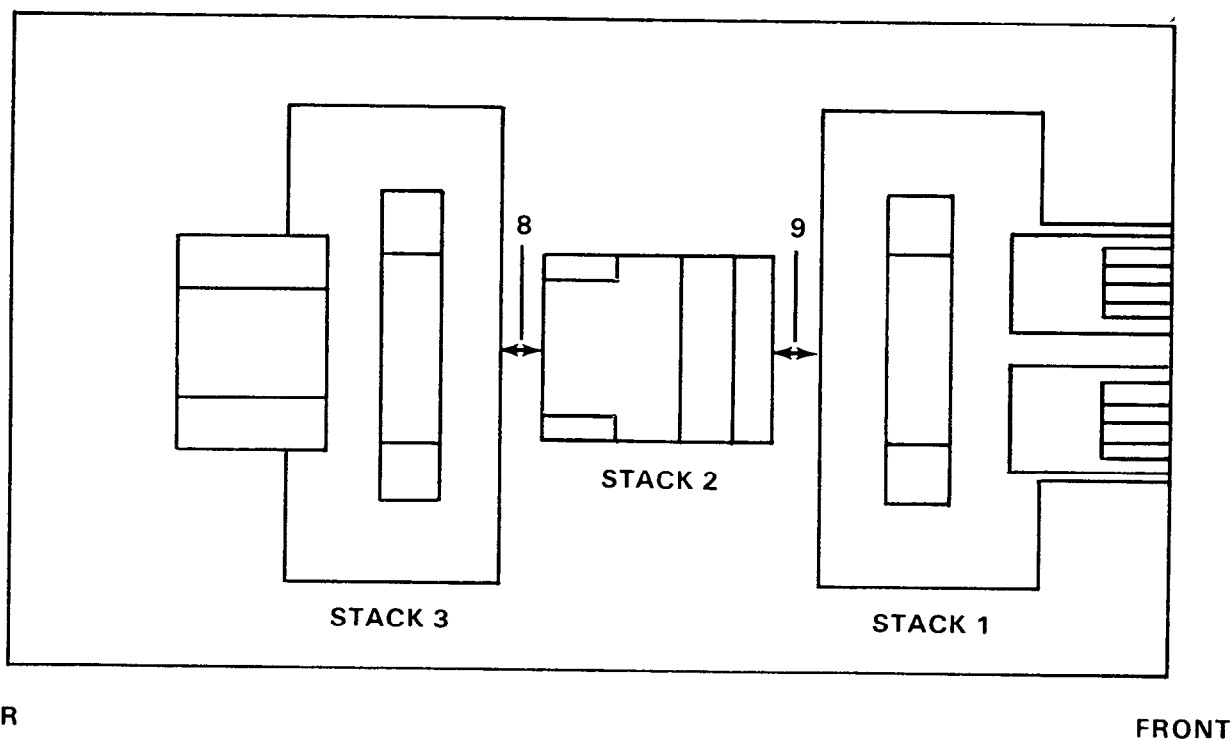
Note: This drawing is not drawn to scale.



- ⑦ Place and center two 42- by 10-inch pieces of honeycomb 10 inches from the front edge of the stack.
- ⑧ Place a 3/4- by 42- by 10-inch piece of plywood on top of the 42- by 10-inch pieces of honeycomb.
- ⑨ Place a 42- by 10-inch piece of honeycomb on top of the 3/4- by 42- by 10-inch piece of plywood.
- ⑩ Place a 10- by 10-inch piece of honeycomb on top of each end of the 42- by 10-inch honeycomb.
- ⑪ Place a 3/4- by 10- by 10-inch piece of plywood on top of each 10- by 10-inch piece of honeycomb.
- ⑫ Place a 10- by 10-inch piece of honeycomb on top of each 3/4- by 10- by 10-inch piece of plywood.

Figure 3-5. Honeycomb stack 3 prepared (continued)

- Notes: 1. This drawing is not drawn to scale.
 2. All measurements are given in inches.



| Stack Number | Position of Stack on Platform |
|--------------|---|
| 1 | Place stack: Centered flush with the nose bumper. Note: Centered with a 4 1/2-inch overhang if nose bumper is not installed. |
| 2 | Centered 9 inches from the rear edge of stack 1. |
| 3 | Centered 8 inches from the rear edge of stack 2. |

Figure 3-6. Honeycomb stacks positioned on platform

3-4. Preparing Forklift Before Positioning

Prepare the forklift before positioning it on the platform as described below and shown in Figures 3-7 through 3-15.

a. Make sure the fuel tank is not more than 3/4 full.

b. Remove the roll-over protection structure (ROPS) and fenders.

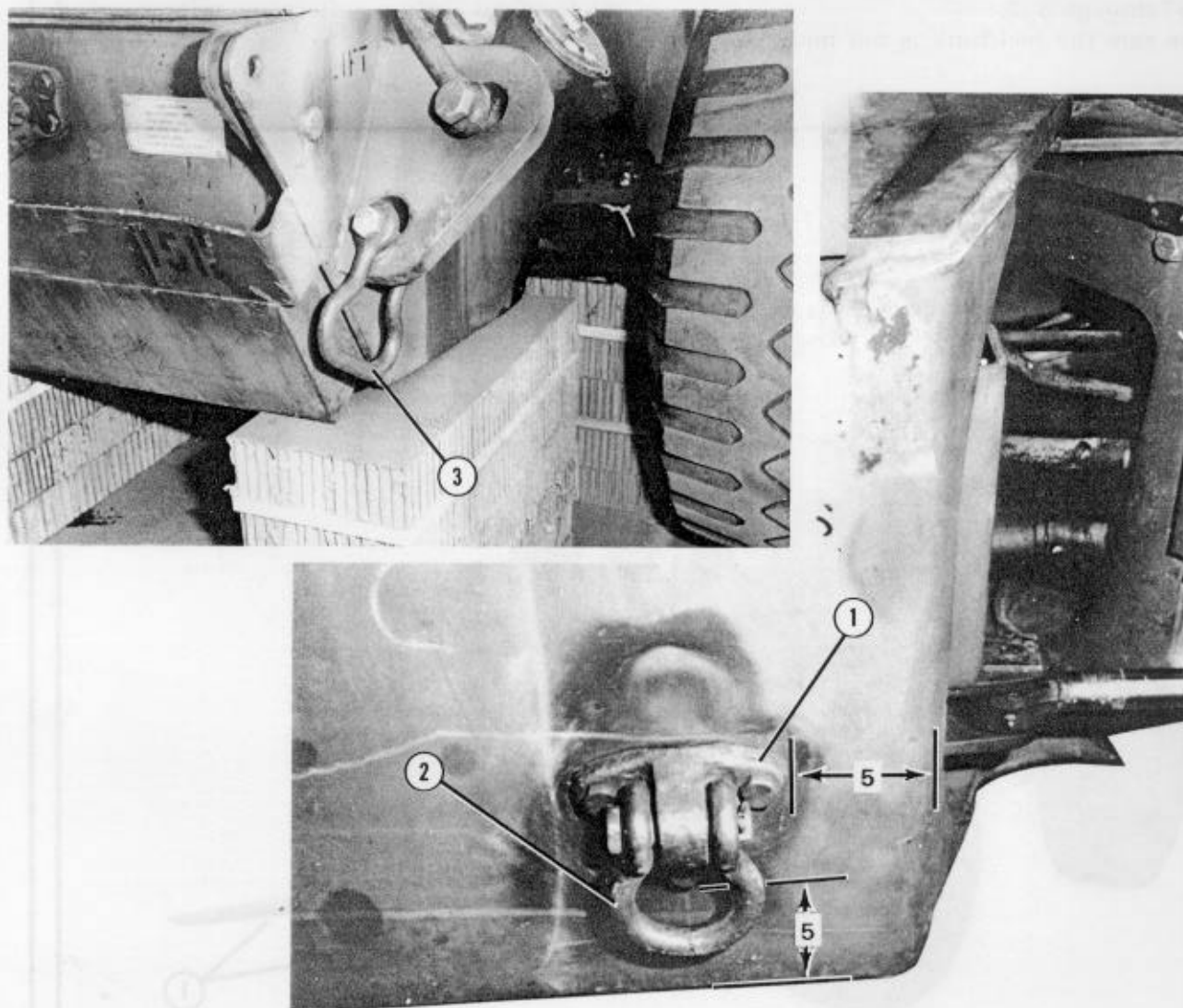
c. Tape all lights, reflectors, mirrors, and gauges.



① Adjust the forks on the carriage so that they are aligned with the mast.

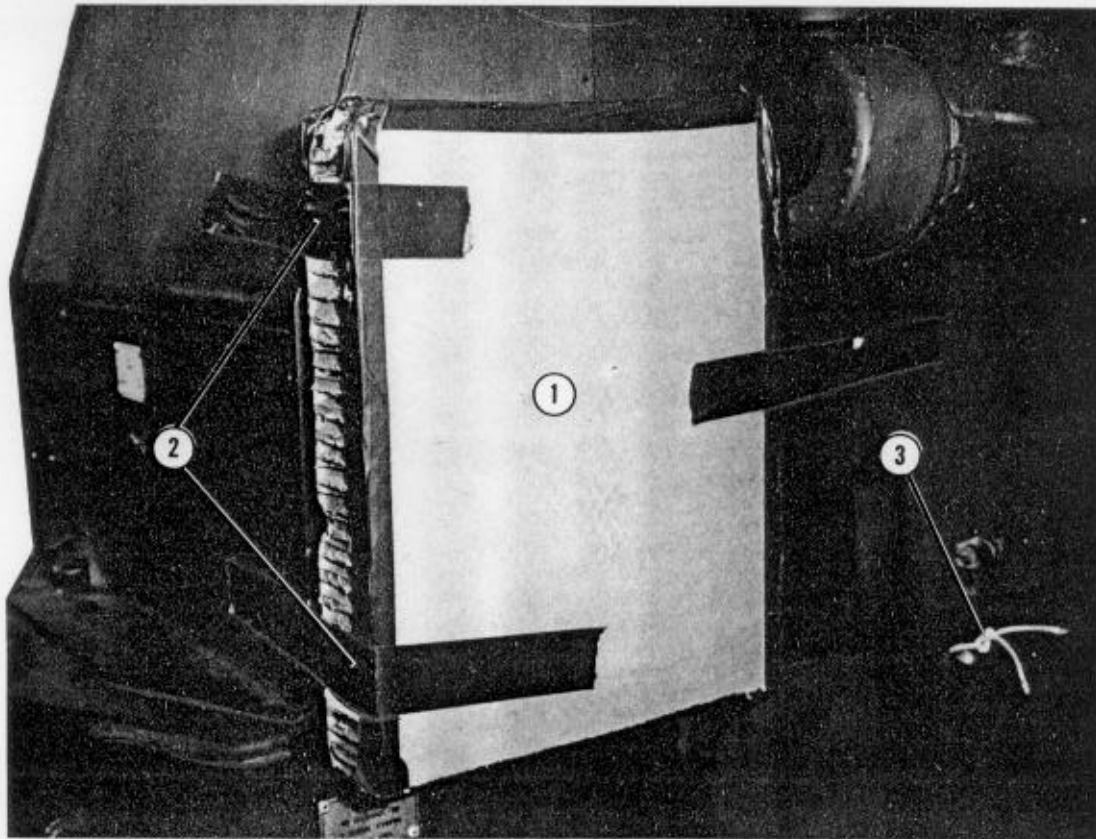
Figure 3-7. Forks aligned with the mast

Note: All measurements are given in inches.



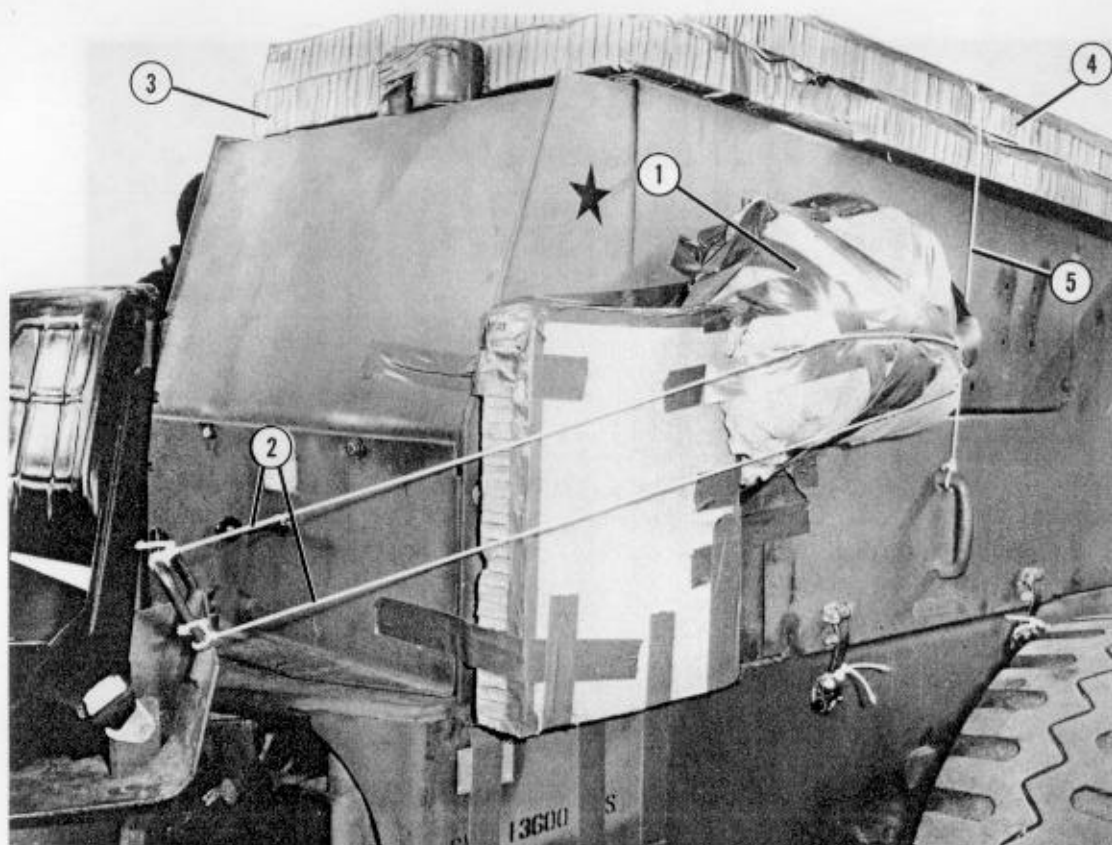
- ① Install a 5-ton truck lifting shackle support bracket on the right and left side of the forklift. Use components from front lifting shackle kit (correct nomenclature: Parts kit, lifting shackle). Position the support bracket 5 inches from the swivel point and 5 inches from the bottom.
- ② Install a 5-ton truck lifting shackle to each support bracket.
- ③ Install a medium clevis on the lower right rear and lower left rear lifting points.

Figure 3-8. 5-ton truck lifting shackle support bracket installed



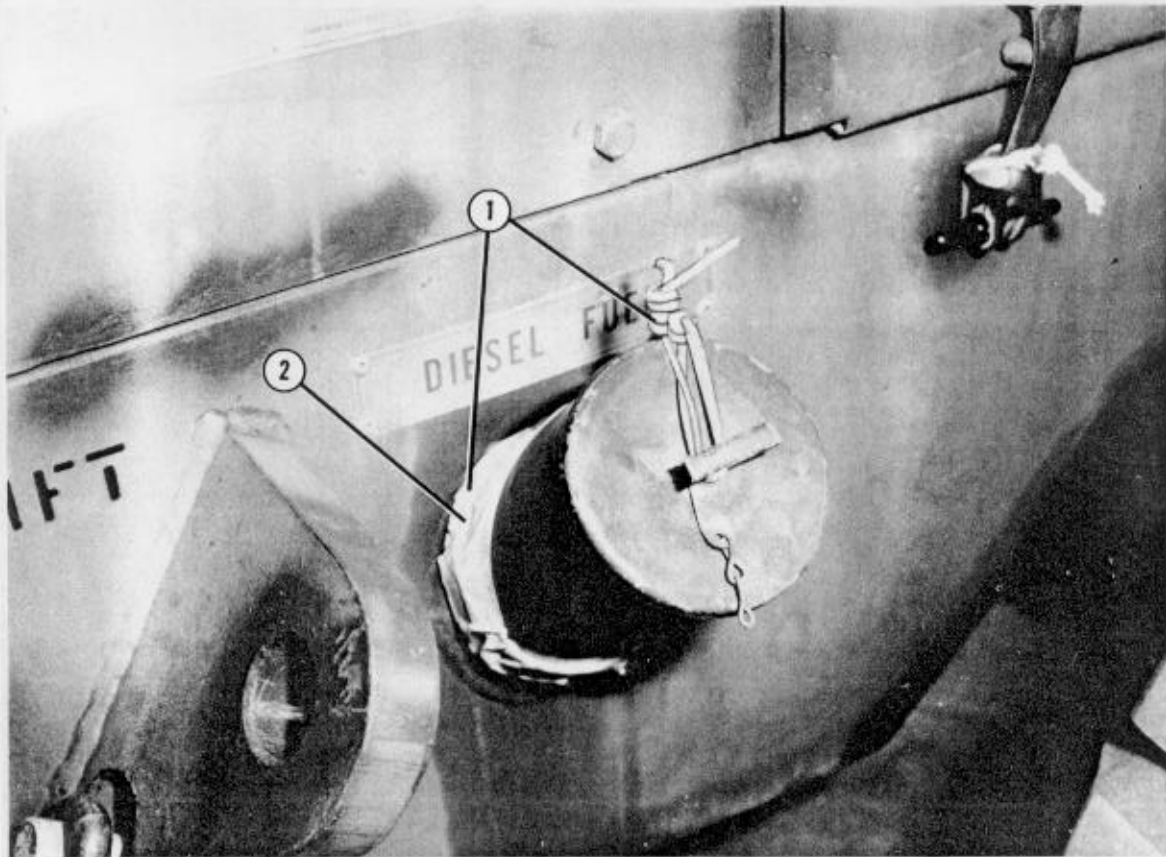
- ① Place a 15- by 19-inch piece of honeycomb with indents to fit over the air cleaner indicator, quick start control, and slave receptacle. Make sure the honeycomb is flush with the body.
- ② Tape around the edges of the honeycomb, and tape the honeycomb to the body.
- ③ Secure the engine's compartment cover handles with type III nylon cord.

Figure 3-9. Air cleaner indicator, quick start control, and slave receptacle prepared



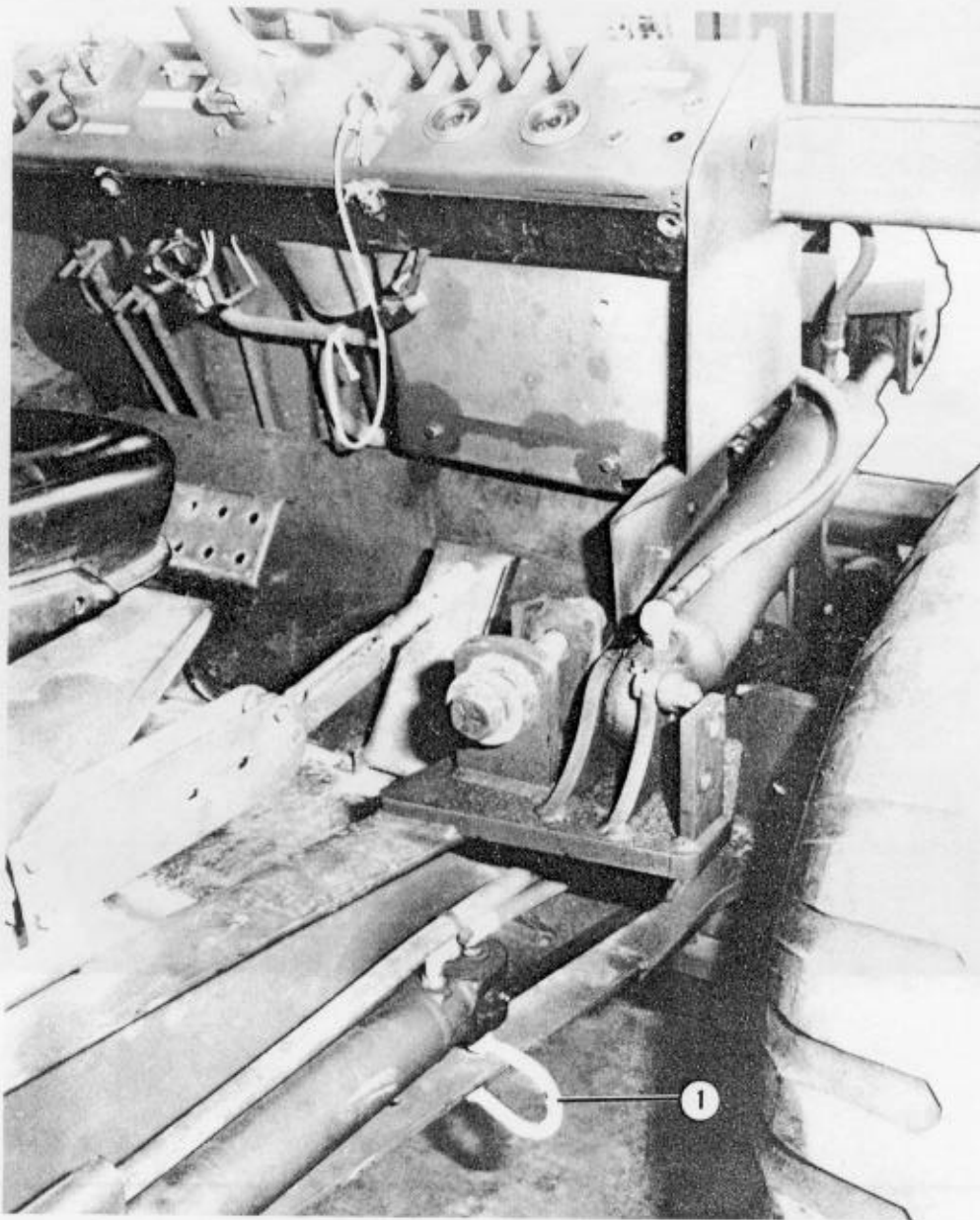
- ① Wrap the air cleaner with cellulose wadding and tape it in place.
- ② Secure the honeycomb (placed in Figure 3-9) and cellulose wadding in place with type III nylon cord.
- ③ Place a 36- by 54-inch piece of honeycomb with a cutout on top of the engine compartment to fit over the exhaust pipe.
- ④ Place a 36- by 54-inch piece of honeycomb on top of the honeycomb placed in step 3.
- ⑤ Secure the honeycomb in place with type III nylon cord.

Figure 3-10. Air cleaner and exhaust pipe prepared



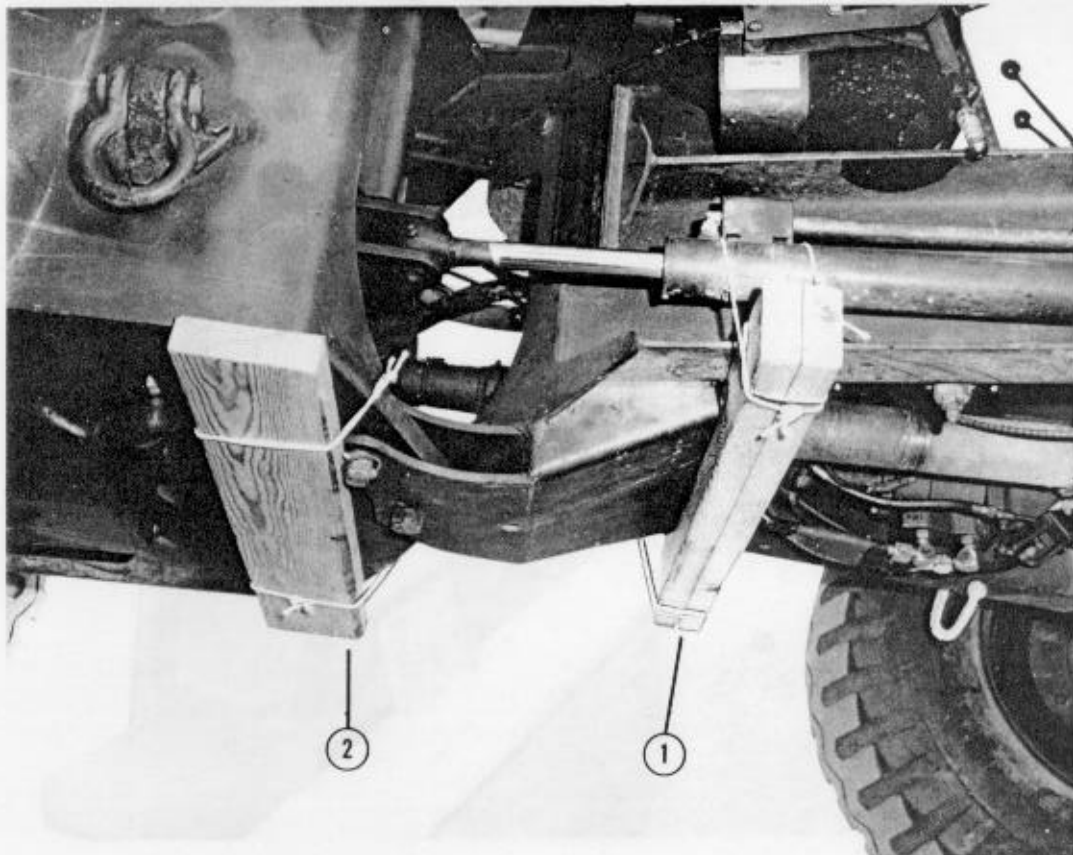
- ① Secure the fuel pipe with a double length of type III nylon cord by tying the base of the fuel tank filler with a surgeon knot and locking knot. Pass the free ends of the cord over the fuel cap and around the T-bar. Secure the ends with a surgeon knot and locking knot.
- ② Tape the type III nylon cord at the base of the fuel tank filler pipe in place.

Figure 3-11. Fuel cap secured



- ① Install a type V, tie-down clevis without a spacer in the forward holes of the drivers support chassis on the right and left side of the forklift.

Figure 3-12. Type V, tie-down clevis installed



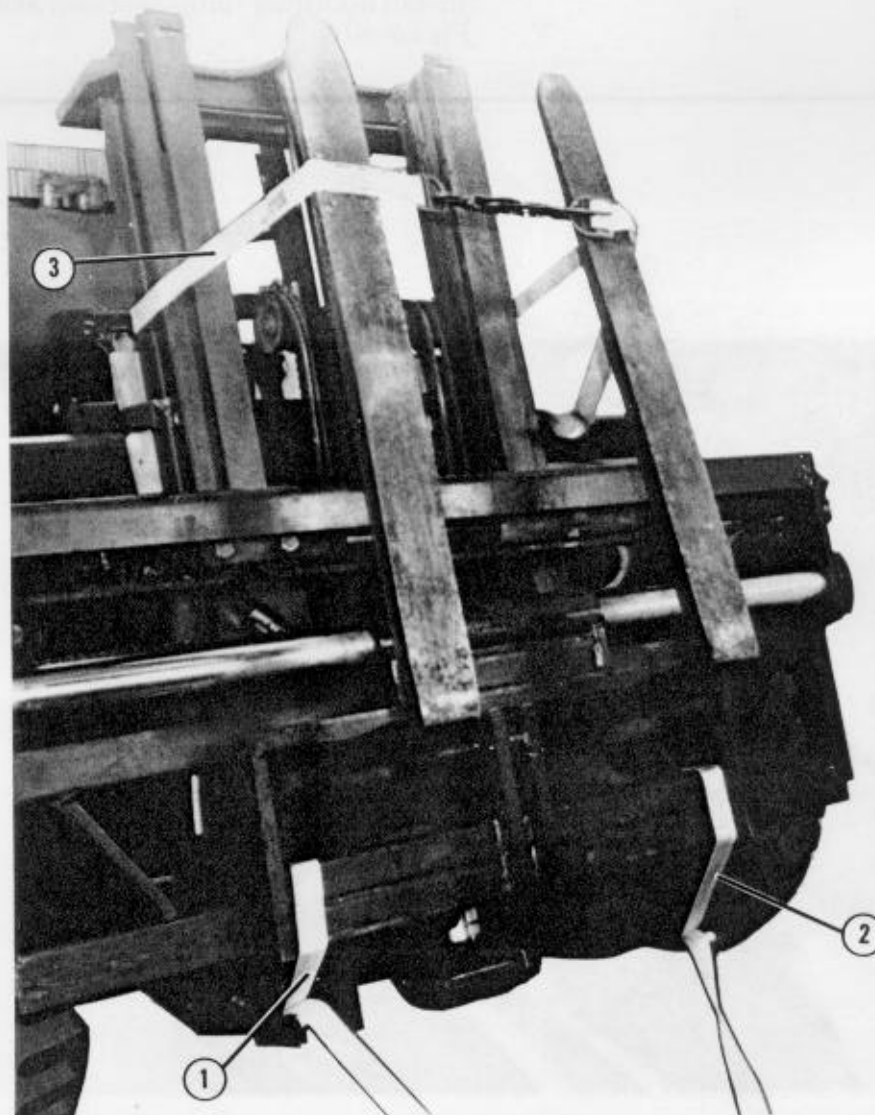
- ① Place two 2- by 4- by 32-inch pieces of lumber under the frame, flush with the articulating link lip. Secure the lumber in place with type III nylon cord.
- ② Place a 2- by 6- by 32-inch piece of lumber under the frame, flush with the edge of the engine compartment. Secure the lumber in place with type III nylon cord.

Figure 3-13. Lumber positioned under forklift



- ① Place a 3/4- by 7- by 10-inch piece of plywood on both sides at the rear of the mast where it comes in contact with the front of the operator's compartment when tilted back.
- ② Raise the carriage 21 inches from the ground (not shown).
- ③ Raise the forks in the upright position (not shown).

Figure 3-14. Plywood placed on mast

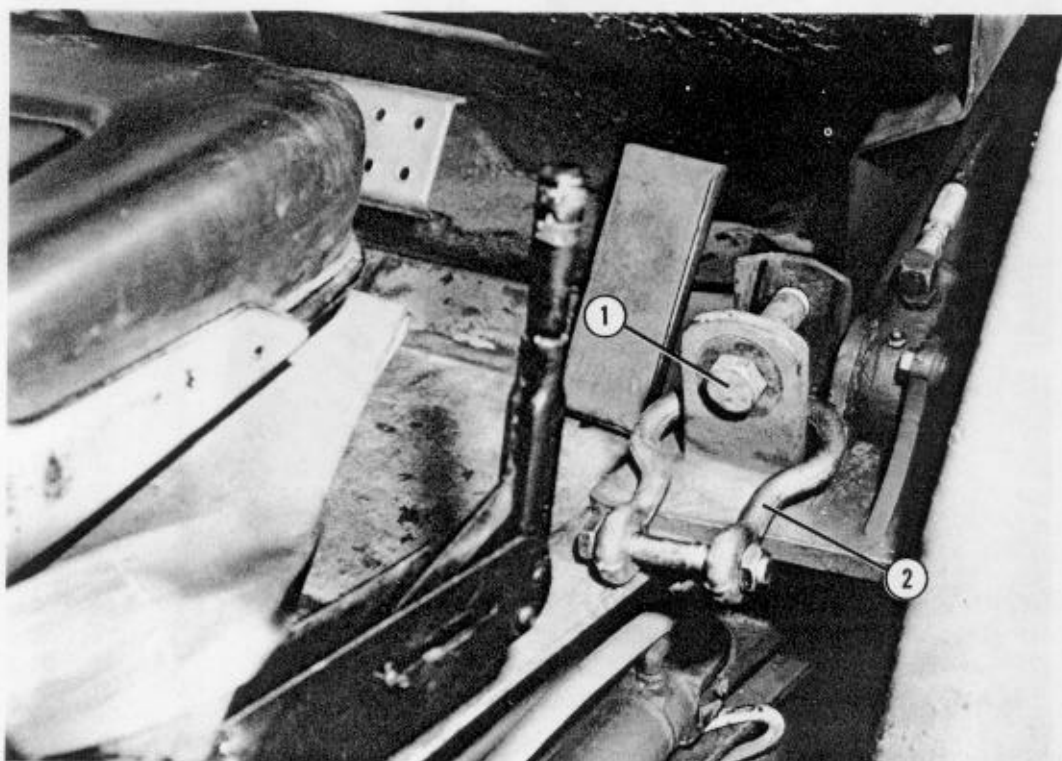


- ① Pass a 15-foot lashing around the right front axle, and through the lower fork carrier side shift frame. Attach the ends with a D-ring and load binder.
- ② Repeat step 1 for the left side of the forklift.
Note: Do not close load binders at this time. The lashings will be tightened after the forklift is positioned on the platform.
- ③ Pass a 15-foot lashing around the mast and forks. Attach the ends with a D-ring and load binder. Tighten the lashing but do not close the load binder at this time.

Figure 3-15. Carriage and forks secured

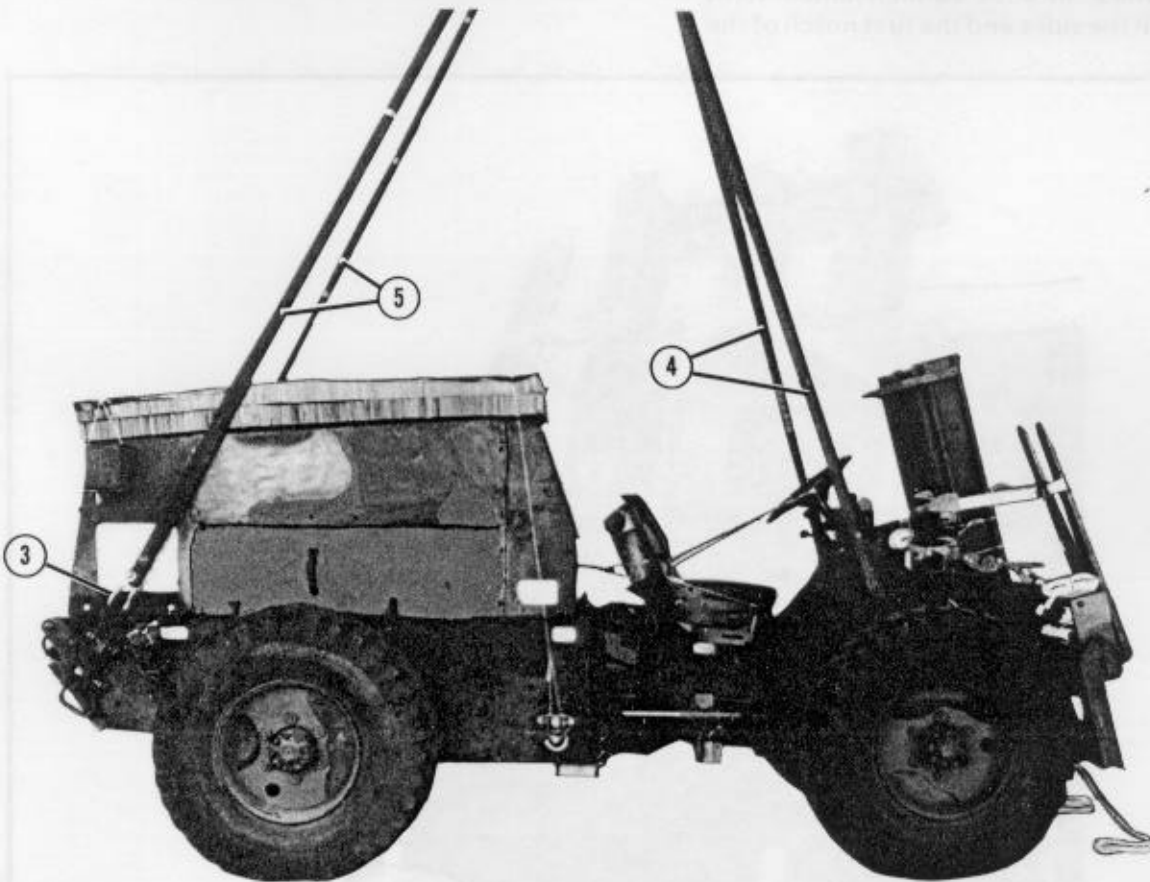
3-5. Installing Lifting Slings

Install the lifting slings as shown and described in Figure 3-16.



- ① Install a large clevis bolt to the right and left lower ROPS support bracket.
- ② Attach a medium clevis to the brackets.

Figure 3-16. Lifting slings installed



- ③ Attach two medium clevises to the upper right rear and upper left rear lifting points.
- ④ Attach a 16-foot (2-loop), type XXVI nylon sling to each medium clevis in step 2.
- ⑤ Attach a 16-foot (2-loop), type XXVI nylon sling to each set of double medium clevises in step 3.

Figure 3-16. Lifting slings installed (continued)

3-6. Positioning Forklift

Position the forklift on the platform as follows.

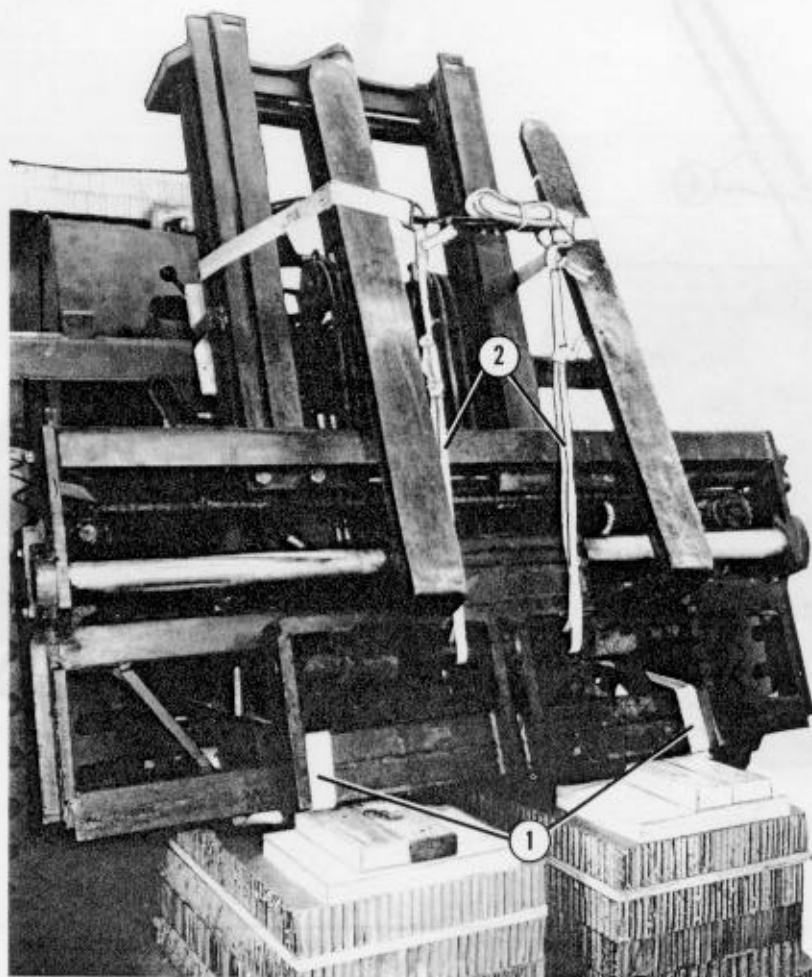
- a. Position and center the forklift on the platform to make sure that the front and rear axles are centered on top of honeycomb stacks 1 and 3.
- b. Lower the carriage until it rests on the 2-by 4-by 12-inch lumber on stack 1.

Note: Adjust the 2- by 4- by 12-inch lumber to fit between the sides and the first notch of the

fork carriage assembly, then nail the lumber in place.

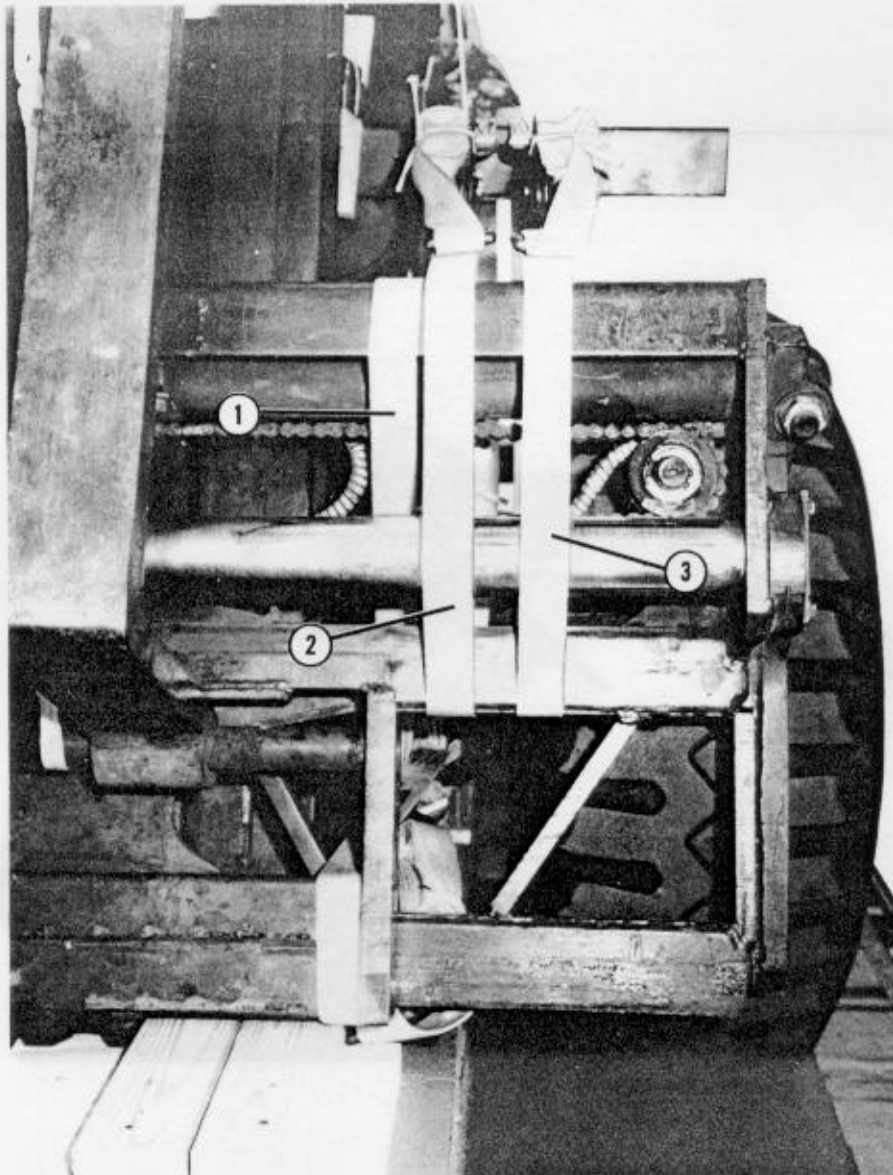
3-7. Preparing Forklift After Positioned

Finish preparing the forklift as shown in Figures 3-17, 3-18, and 3-19.



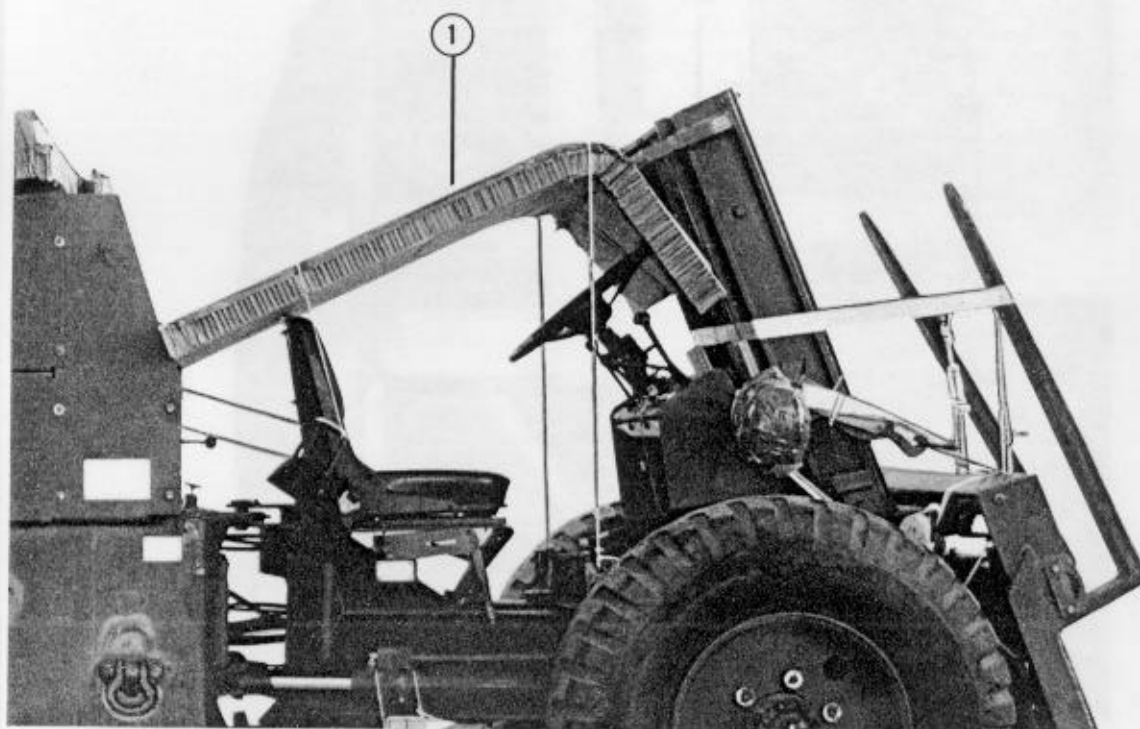
- ① Tighten and secure the lashings installed in Figure 3-15.
- ② Safety the lashing, installed to the carriage assembly in Figure 3-15, with two 5-foot lengths of 1/2-inch tubular nylon webbing.

Figure 3-17. Lashings secured



- ① Pass a 15-foot lashing through the left front lifting bracket and up around the carriage frame. Secure the ends of the lashing with a D-ring and load binder.
- ② Pass a 15-foot lashing around the light support bracket and around the carriage frame. Secure the ends of the lashing with a D-ring and load binder.
- ③ Repeat step 2.
- ④ Repeat steps 1 through 3 for the right side of the forklift (not shown).

Figure 3-18. Carriage secured

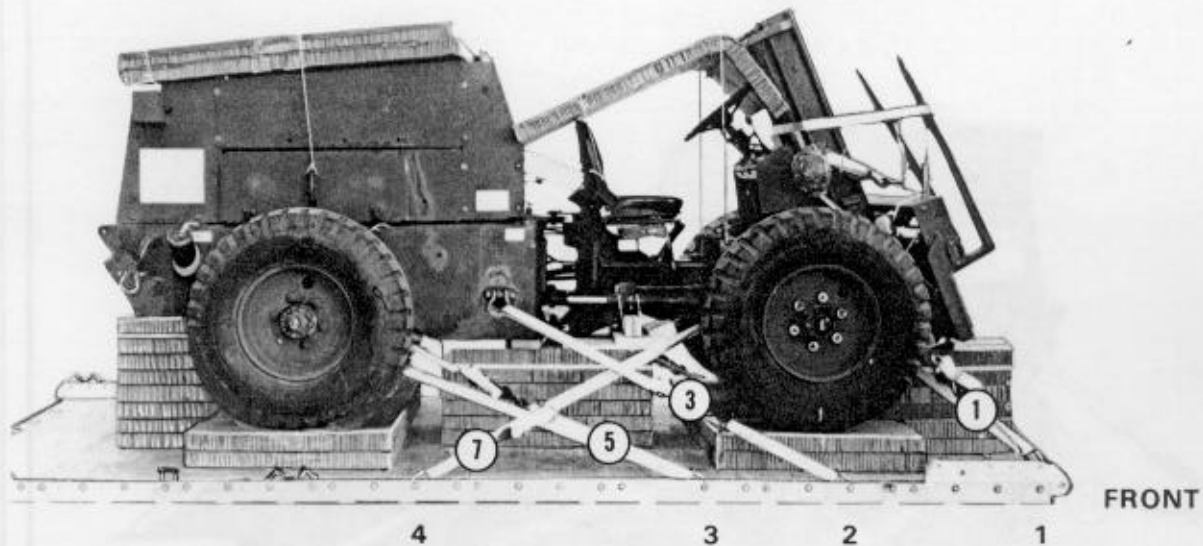


- ① Place a 36- by 60-inch piece of honeycomb over the drivers compartment and secure it with type III nylon cord.

Figure 3-19. Honeycomb secured over drivers compartment

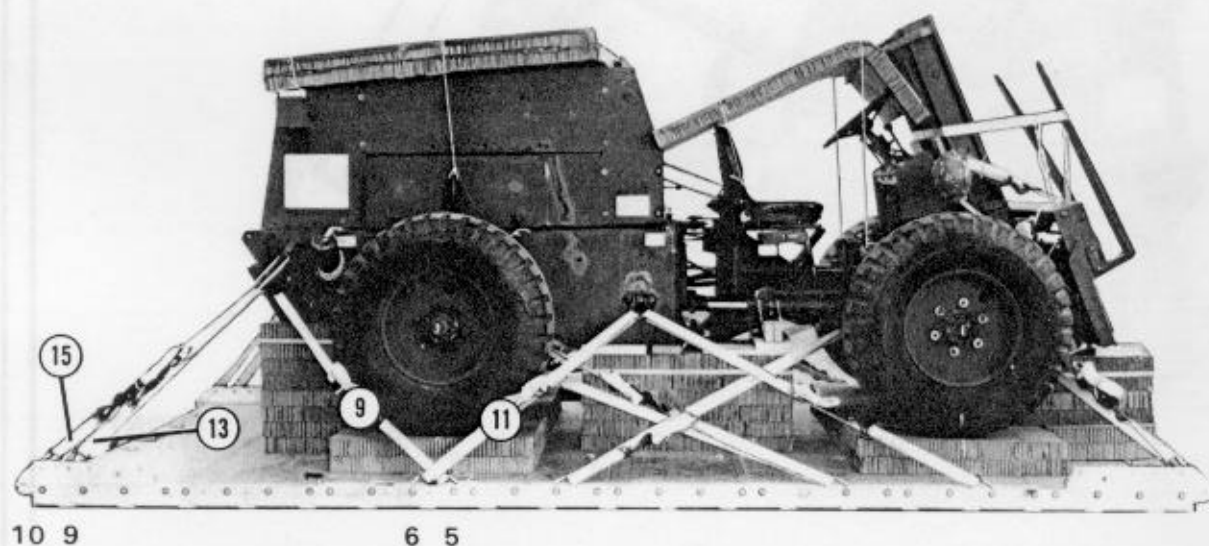
3-8. Lashing Forklift

Lash the forklift to the platform using sixteen 15-foot tie-down assemblies. Install the lashings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 3-20 and 3-21.



| Lashing Number | Tie-down Clevis Number | Instructions |
|----------------|------------------------|--|
| 1 | 1 | Pass lashing: |
| 2 | 1A | Through the tie-down point, right side. |
| 3 | 2 | Through the tie-down point, left side. |
| 4 | 2A | Through the 5-ton lifting shackle, right side. |
| 5 | 3 | Through the 5-ton lifting shackle, left side. |
| 6 | 3A | Around the rear axle, right side. |
| 7 | 4 | Around the rear axle, left side. |
| 8 | 4A | Through the tie-down clevis, right side. |
| | | Through the tie-down clevis, left side. |

Figure 3-20. Lashings 1 through 8 installed



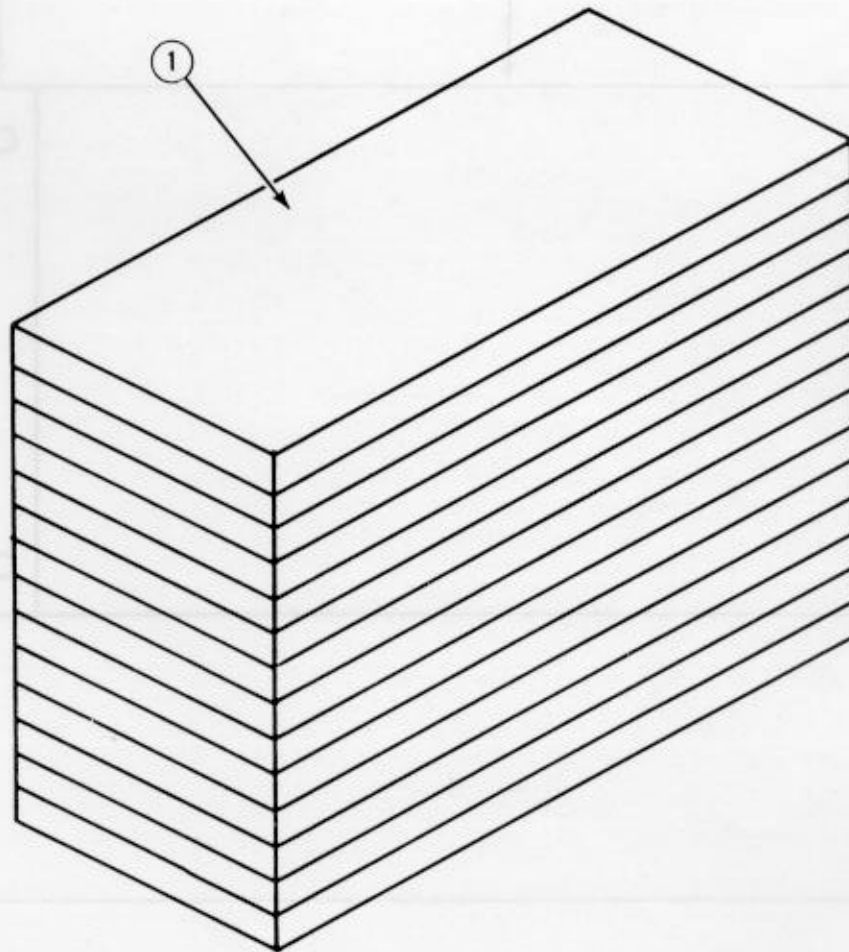
| Lashing Number | Tie-down Clevis Number | Instructions |
|----------------|------------------------|--|
| 9 | 5 | Pass lashing: |
| 10 | 5A | Through medium clevis at the rear lifting point, right side. |
| 11 | 6 | Through medium clevis at the rear lifting point, left side. |
| 12 | 6A | Through the 5-ton lifting shackle, right side. |
| 13 | 9 | Through the 5-ton lifting shackle, left side. |
| 14 | 9A | Through the rear lifting point, right side. |
| 15 | 10 | Through the rear lifting point, left side. |
| 16 | 10A | Through medium clevis at the rear lifting point, right side. |
| | | Through medium clevis at the rear lifting point, left side. |

Figure 3-21. Lashings 9 through 16 installed

3-9. Building and Positioning Parachute Stowage Platform

- a. Build a honeycomb support as shown in Figure 3-22.
- b. Build a parachute stowage platform as shown in Figure 3-23.
- c. Position the honeycomb support and parachute stowage platform and lash the parachute stowage platform as shown in Figure 3-24.

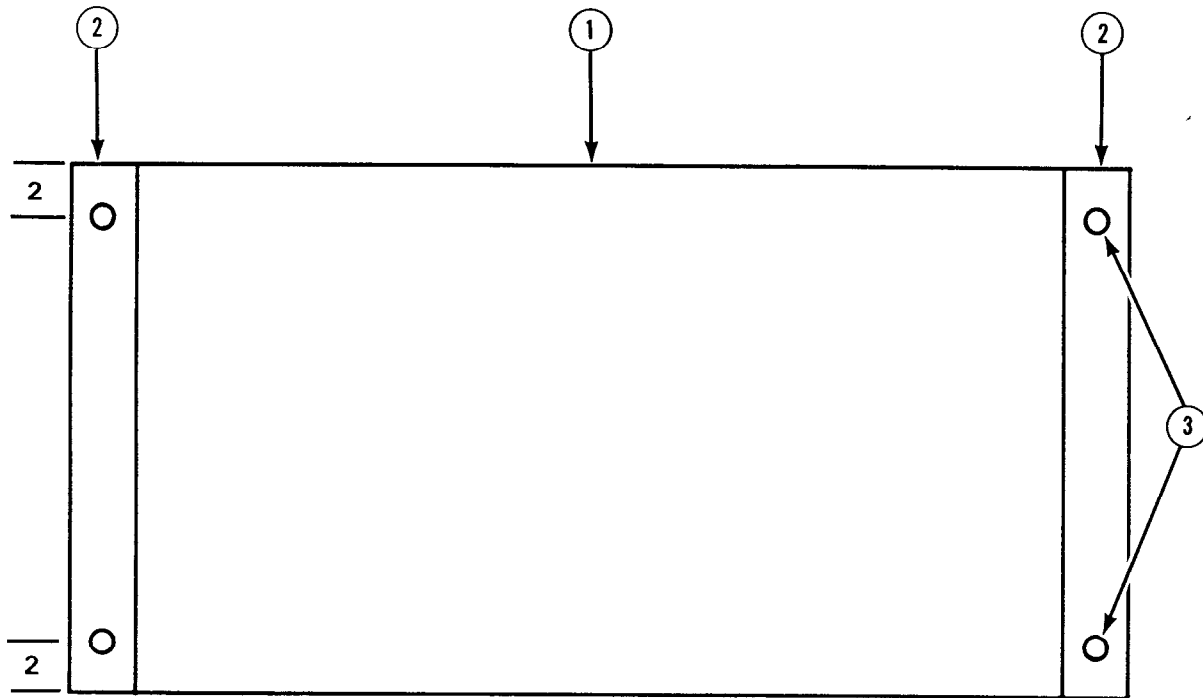
Note: This drawing is not drawn to scale.



- ① Place fourteen 60- by 24-inch pieces of honeycomb as the honeycomb support.

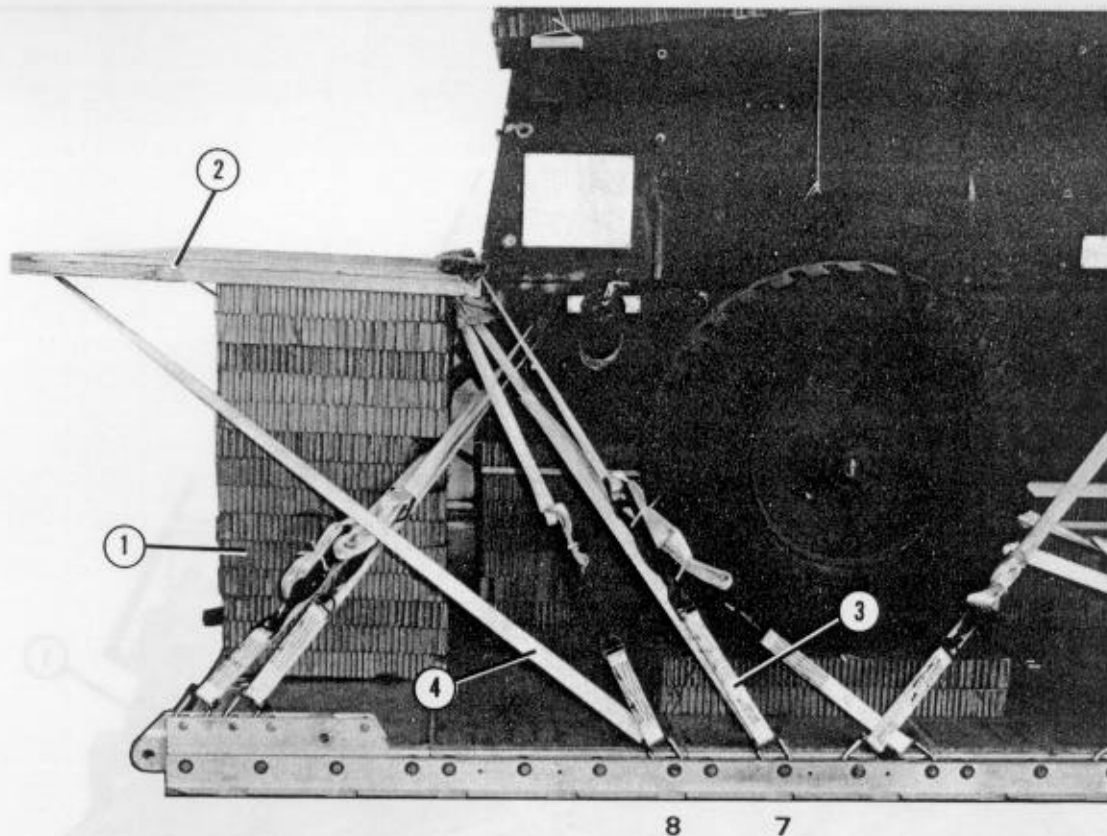
Figure 3-22. Honeycomb support built

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Cut a 3/4- by 60- by 48-inch piece of plywood.
- ② Cut two 2- by 6- by 48-inch pieces of lumber. Place each piece flush at each end of the plywood and secure with 10d nails.
- ③ Drill 2-inch holes as shown.

Figure 3-23. Parachute stowage platform built

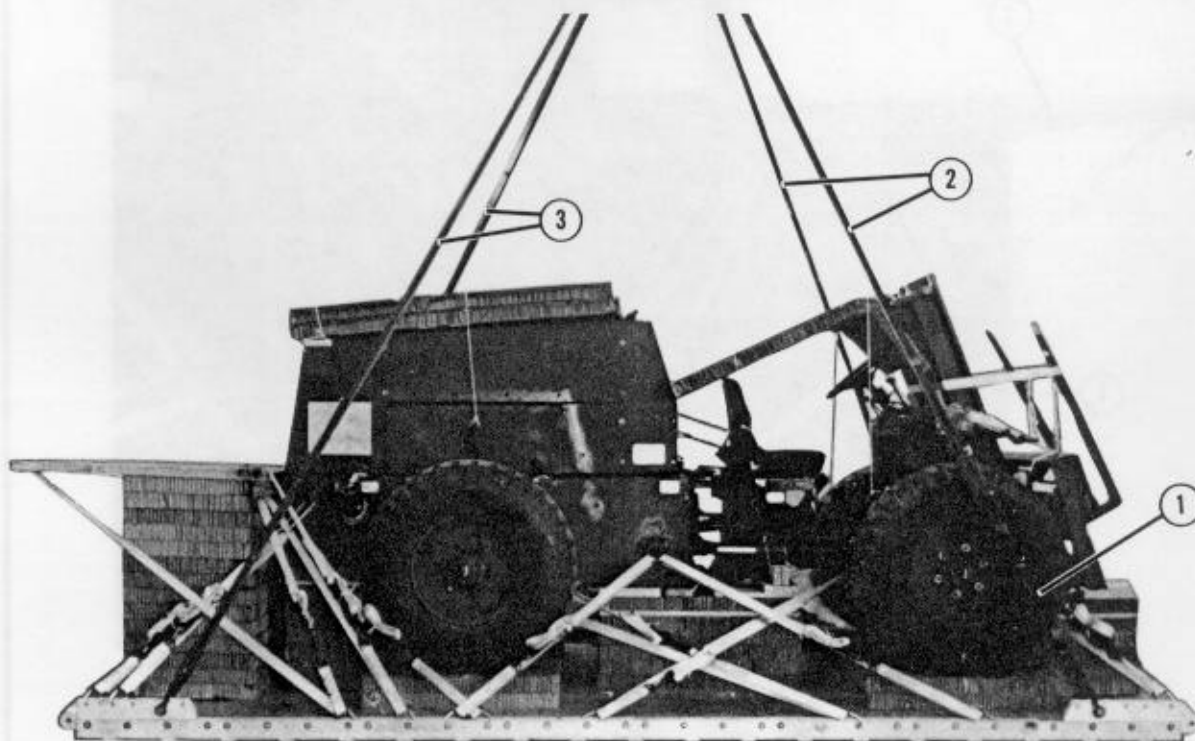


- ① Position and center the honeycomb support on the rear of the platform four inches from honeycomb stack 3.
- ② Place the parachute stowage platform on top of the honeycomb support. Make sure that the parachute stowage platform is flush with the front of the honeycomb support.
- ③ Pass a 15-foot lashing through clevis 7 and through the right front hole of the parachute stowage platform. Secure the ends with a D-ring and load binder.
- ④ Pass a 15-foot lashing through clevis 8 and through the right rear hole and right front hole of the parachute stowage platform. Secure the ends with a D-ring and load binder.
- ⑤ Repeat steps 3 and 4 for the left side using clevises 7A and 8A (not shown).

Figure 3-24. Parachute stowage platform secured

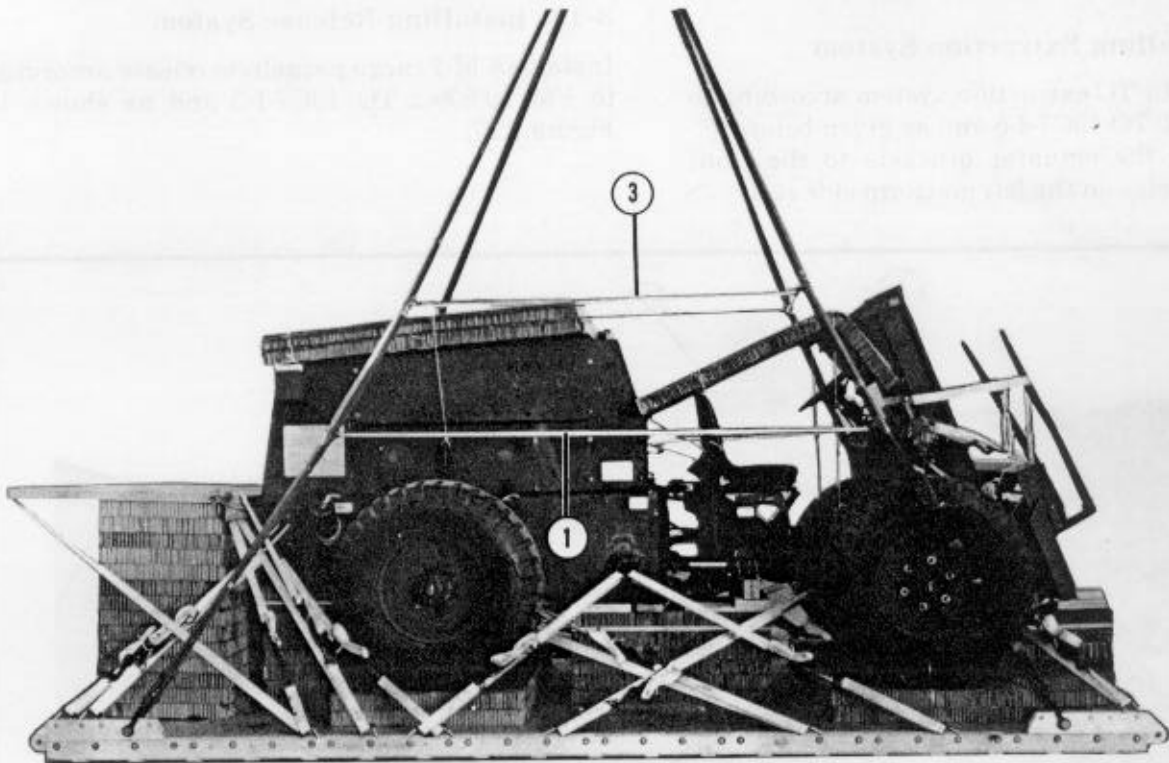
3-10. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and deadman's tie as shown in Figures 3-25 and 3-26.



- ① Attach a 3-foot (2-loop), type XXVI nylon webbing sling to each front tandem link with a large suspension clevis.
- ② Attach a 12-foot (2-loop), type XXVI nylon webbing sling to each 3-foot sling installed in step 1 with a type IV connector link.
- ③ Attach a 16-foot (2-loop), type XXVI nylon webbing sling to each rear tandem link with a large suspension clevis.

Figure 3-25. Suspension slings installed



- ① Safety the right front and rear suspension sling 12 inches above the type IV connector link with a double length 1/2-inch tubular nylon webbing.
- ② Repeat step 1 for the left front and rear suspension slings (not shown).
- ③ Safety the suspension slings with a deadman's tie according to FM 10-500-2/TO 13C7-1-5.

Note: Tape the 1/2-inch tubular webbing to the suspension slings.

Figure 3-26. Suspension slings safetied

3-11. Stowing Cargo Parachutes

a. Prepare and stow three G-11B cargo parachutes on the parachute stowage platform according to FM 10-500-2/TO 13C7-1-5.

b. Install the parachute restraint straps according to FM 10-500-2/TO 13C7-1-5 using clevises 8, 9, 8A, and 9A.

c. Install the multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

3-12. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as given below.

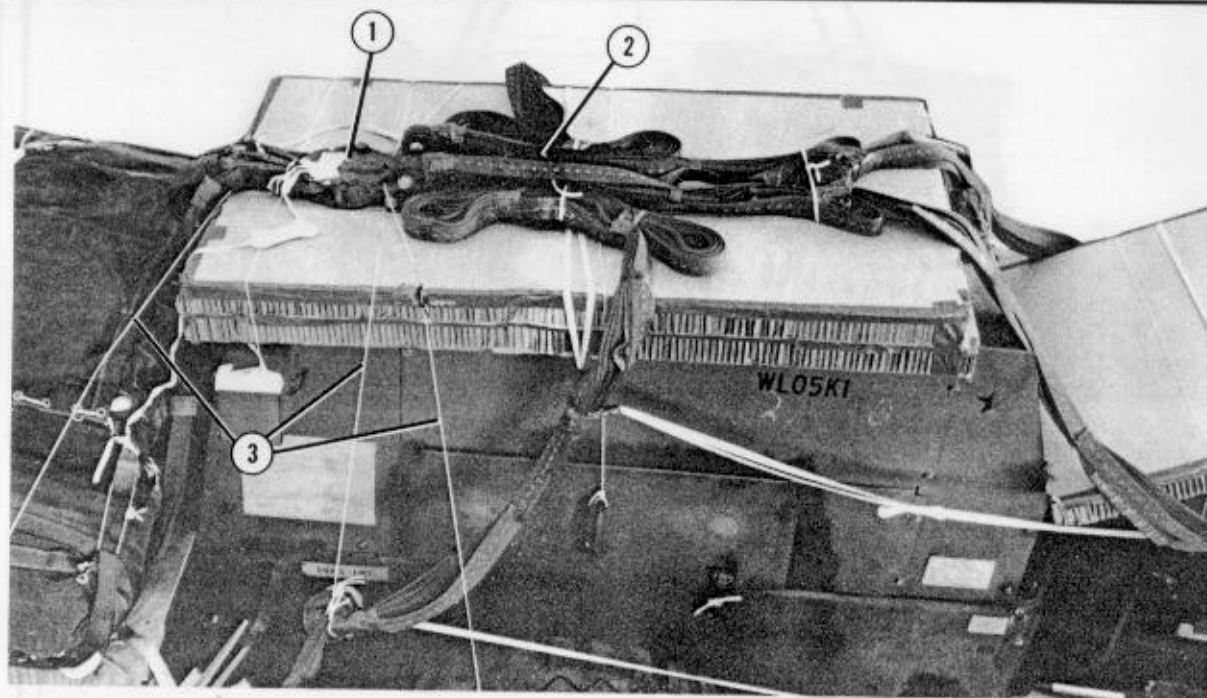
a. Install the actuator brackets to the front mounting holes on the left platform side rail.

b. Attach a 16-foot cable to the actuator. Run the cable toward the rear. Safety the cable to tie-down ring D8 with type I, 1/4-inch cotton webbing.

c. Install a 9-foot (2-loop or 4-loop), type XXVI nylon webbing sling as the deployment line according to FM 10-500-2/TO 13C7-1-5.

3-13. Installing Release System

Install an M-1 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-27.



- ① Place the M-1 release on top of the 36- by 54-inch pieces of honeycomb. Attach the suspension slings and parachute riser extensions according to FM 10-500-2/TO 13C7-1-5.
- ② S-fold the excess suspension slings, and tie it with type I, 1/4-inch cotton webbing.
- ③ Secure the M-1 release with type III nylon cord to convenient points.

Figure 3-27. M-1 release installed

3-14. Installing Provisions for Emergency Restraints

Install the provisions for the emergency restraints on the load according to FM 10-500-2/TO 13C7-1-5.

3-15. Placing Extraction Parachute

Place the extraction parachute as described below:

a. *C-130 Aircraft.* Place a 22-foot cargo extraction parachute; a 60-foot (3-loop), type XXVI nylon webbing extraction line; and a 3 3/4-inch, two-point link assembly on the load for installation in the aircraft.

b. *C-141 Aircraft.* Place a 22-foot (heavy-duty) cargo extraction parachute; a 140-foot (3-loop), type XXVI nylon webbing extraction line; and a 3 3/4-inch, two-point link assembly on the load for installation in the aircraft.

3-16. Marking Rigged Load

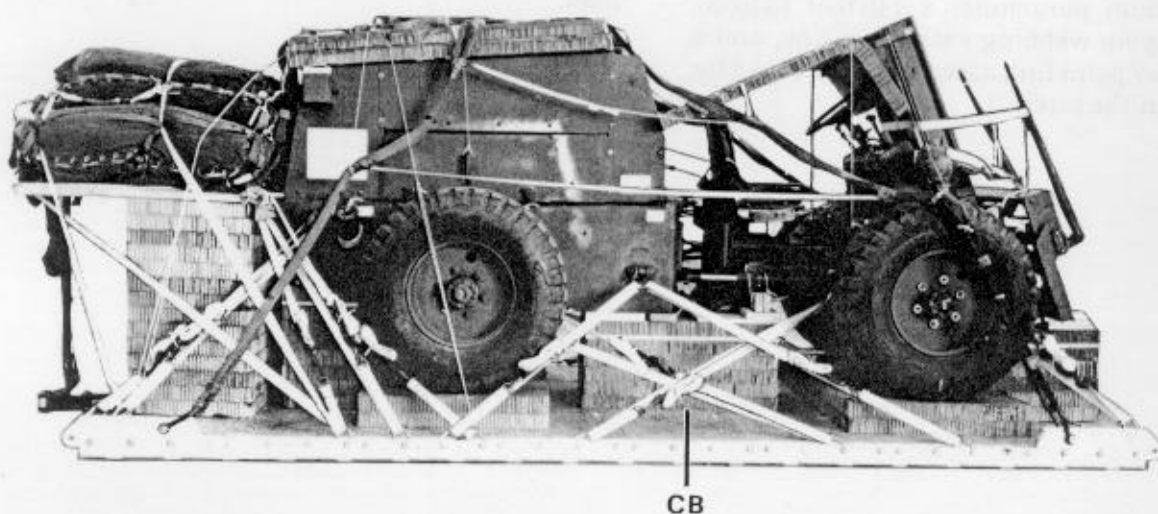
Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 3-28. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

3-17. Equipment Required

Use the equipment listed in Table 3-2 to rig this load.

CAUTION

**Make the final rigger inspection required by FM 10-500-2/
TO 13C7-1-5 before the load leaves the rigging site.**

**RIGGED LOAD DATA**

| | | |
|----------------------------------|----------------------|---------------|
| Weight: | Load shown | 12,370 pounds |
| | Maximum load allowed | 13,000 pounds |
| Height | | 86 inches |
| Width | | 108 inches |
| Length | | 220 inches |
| Overhang: | Front | 4 1/2 inches |
| | Rear | 24 inches |
| CB (from front edge of platform) | | 82 inches |
| Extraction system | | EFTC |

Figure 3-28. M4K, 4,000-pound capacity forklift truck rigged on a type V platform for low-velocity airdrop

Table 3-2. Equipment required for rigging the 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop

| National Stock Number | Item | Quantity |
|-----------------------|--|-------------|
| 8040-00-273-8713 | Adhesive, paste, 1-gal | As required |
| 1670-00-568-0323 | Band, rubber, retainer | As required |
| 5305-00-177-5617 | Bolt, 1-in (large clevis) | 2 |
| | Clevis, suspension: | |
| 4030-00-678-8562 | 3/4-in (medium) | 8 |
| 4030-00-090-5354 | 1-in (large) | 8 |
| 4020-00-240-2146 | Cord, nylon, type III, 550-lb | As required |
| 1670-00-434-5785 | Coupling, airdrop, extraction force transfer w 16-ft cable | 1 |
| | Cover: | |
| 1670-00-360-0328 | Clevis, large | 4 |
| 1670-00-360-0329 | Link assembly (type IV) | 5 |
| 8135-00-664-6958 | Cushioning material, packaging, cellulose wadding | As required |
| 1670-01-183-2678 | Leaf, extraction line | 2 |
| | Link assembly: | |
| | Two-point: | |
| 5306-00-435-8994 | Bolt, 1-in diam, 4-in long | 2 |
| 5310-00-232-5165 | Nut, 1-in, hexagonal | 2 |
| 1670-00-003-1953 | Plate, side, 3 3/4-in | 2 |
| 1670-00-783-5988 | Type IV | 5 |
| | Lumber: | |
| 5510-00-220-6146 | 2- by 4-in: | |
| | 12-in | 6 |
| | 32-in | 2 |
| 5510-00-220-6148 | 2- by 6-in: | |
| | 32-in | 1 |
| | 48-in | 2 |
| | Nail, steel wire, common: | |
| 5315-00-010-4659 | 8d | As required |
| 5315-00-010-4661 | 10d | As required |
| 1670-00-753-3928 | Pad, energy-dissipating, honeycomb, | |
| | 3- by 36- by 96-in: | 20 sheets |
| | 9- by 24-in | (8) |
| | 10- by 10-in | (8) |
| | 15- by 19-in | (1) |
| | 18- by 28-in | (8) |
| | 32- by 40-in | (6) |
| | 36- by 18-in | (2) |
| | 36- by 24-in | (2) |
| | 36- by 54-in | (2) |
| | 36- by 60-in | (1) |
| | 42- by 10-in | (6) |
| | 48- by 21-in | (2) |
| | 60- by 24-in | (14) |
| | 80- by 36-in | (4) |

Table 3-2. Equipment required for rigging the 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop (continued)

| National Stock Number | Item | Quantity |
|-----------------------|---|----------|
| | Parachute: | |
| | Cargo: | |
| 1670-01-016-7841 | G-11B | 3 |
| | Cargo extraction: | |
| 1670-00-687-5458 | 22-ft or | 1 |
| 1670-01-063-3716 | 22-ft | 1 |
| 9030-01-222-6087 | Parts kit, lifting shackle (5-ton truck) | 2 |
| | Platform, AD, type V, 16-ft: | 1 |
| | Bracket: | |
| 1670-01-162-2375 | Inside EFTA | (1) |
| 1670-01-162-2374 | Outside EFTA | (1) |
| 1670-01-162-2372 | Clevis assembly | (22) |
| 1670-01-162-2376 | Extraction bracket assembly | (1) |
| 1670-01-162-2381 | Tandem link | (4) |
| | Plywood: | |
| 5530-00-128-4981 | 3/4-in: | |
| | 7- by 10-in | (2) |
| | 9- by 24-in | (2) |
| | 10- by 10-in | (4) |
| | 12- by 14-in | (4) |
| | 18- by 28-in | (2) |
| | 32- by 7-in | (2) |
| | 32- by 17-in | (1) |
| | 32- by 40-in | (1) |
| | 42- by 10-in | (2) |
| | 60- by 48-in | (1) |
| 1670-01-097-8816 | Release, cargo parachute, M-1 | 1 |
| | Sling, cargo airdrop: | |
| | For deployment line: | |
| 1670-01-062-6304 | 9-ft (2-loop), type XXVI nylon webbing or | 1 |
| 1670-01-062-6305 | 9-ft (4-loop), type XXVI nylon webbing | 1 |
| | For extraction line: | |
| 1670-01-062-6313 | 60-ft (3-loop), type XXVI nylon webbing (C-130 aircraft) | 1 |
| 1670-01-107-7651 | 140-ft (3-loop), type XXVI nylon webbing (C-141 aircraft) | 1 |
| | For lifting slings: | |
| 1670-01-063-7761 | 16-ft (2-loop), type XXVI nylon webbing | 4 |
| | For suspension slings: | |
| 1670-01-062-6301 | 3-ft (2-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-6303 | 12-ft (2-loop), type XXVI nylon webbing | 2 |
| 1670-01-063-7761 | 16-ft (2-loop), type XXVI nylon webbing | 2 |
| | For riser extensions: | |
| 1670-01-062-6302 | 20-ft (2-loop), type XXVI nylon webbing | 6 |

Table 3-2. Equipment required for rigging the 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop (continued)

| National Stock Number | Item | Quantity |
|-----------------------|--|-------------|
| 1670-00-040-8219 | Strap: | 2 |
| 7510-00-266-6710 | Parachute release, multicut comes w 3 knives | As required |
| 1670-00-937-0271 | Tape, masking, 2-in | 30 |
| | Tie-down assembly, 15-ft | |
| | Webbing: | |
| 8305-00-268-2411 | Cotton, 1/4-inch, type I | As required |
| | Nylon: | |
| | Tubular: | |
| 8305-00-082-5752 | 1/2 in, natural or | As required |
| 8305-00-268-2453 | 1/2-in, olive drab | As required |

CHAPTER 4**RIGGING THE 6,000-POUND CAPACITY
FORKLIFT TRUCK ON A TYPE V PLATFORM**

Section I**LOW-VELOCITY AIRDROP****4-1. Description of Load**

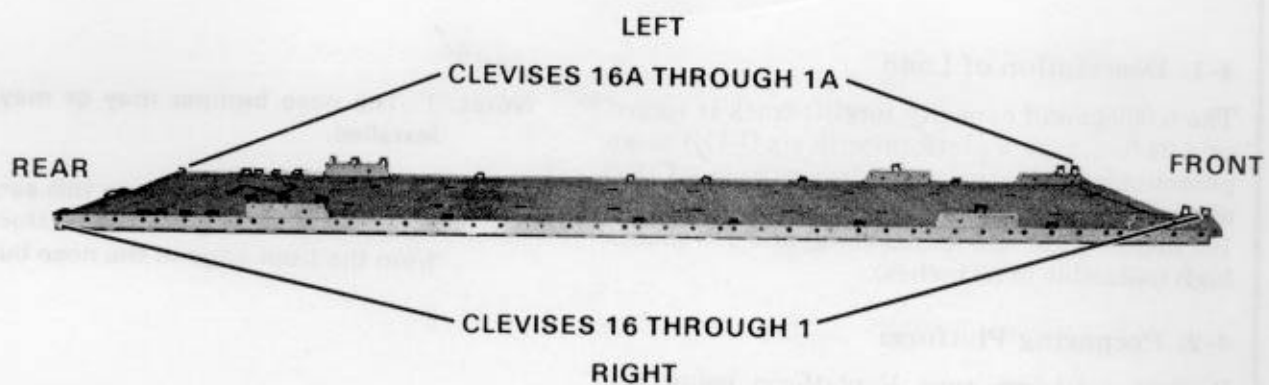
The 6,000-pound capacity forklift truck is rigged on a 24-foot, type V platform with six G-11⁵ cargo parachutes for low-velocity airdrop from a C-130 aircraft. The forklift weighs 23,000 pounds. It is 102 inches wide, 228 inches long, and 124 inches high (reducible to 89 inches).

MSG JAN 95
Notes: 1. The nose bumper may or may not be installed.

2. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.

4-2. Preparing Platform

Prepare a 24-foot, type V platform using two tandem links, four suspension links, and 32 clevis assemblies as shown in Figure 4-1.



Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P / TO 13C7-52-22.
2. Install a suspension link to the front of each platform side rail using holes 9, 10, and 11.
3. Install a suspension link to the rear of each platform side rail using holes 38, 39, and 40.
4. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
5. Install clevises on bushings 1 and 2 of each front tandem link.
6. Install a clevis on bushing 3 of each front suspension link.
7. Install clevises on bushings 1, 2, and 4 of each rear suspension link.
8. Starting at the front of each platform side rail, install clevises to bushings bolted on holes 7, 15, 20, 24, 32, 42, 43, 44, 45, and 48.
9. Starting at the front of each platform side rail, number the clevises bolted on the right side from 1 through 16 and those bolted on the left side from 1A through 16A.

Figure 4-1. Platform prepared

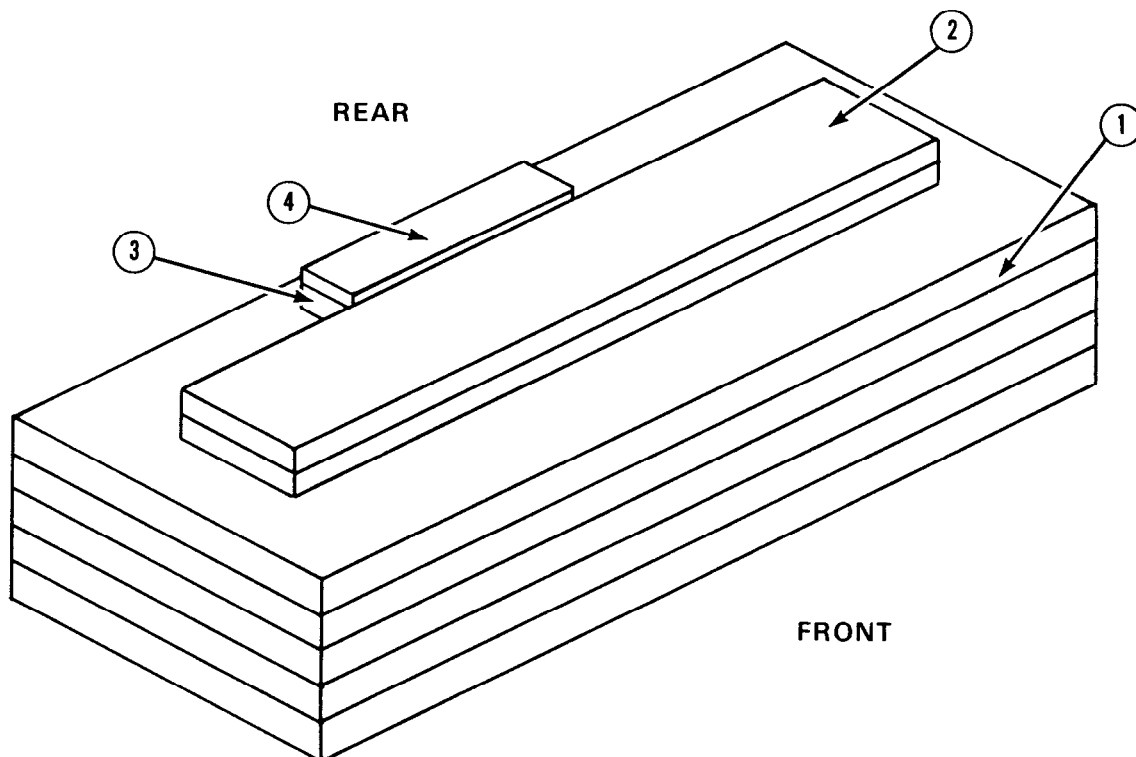
4-3. Preparing and Positioning Honeycomb Stacks

Use the materials in Table 4-1 to prepare nine honeycomb stacks as shown in Figures 4-2 through 4-7. Position the stacks on the platform according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 4-8.

Table 4-1. Materials required to build honeycomb stacks

| Stack Number | Pieces | Width (Inches) | Length (Inches) | Material | Instructions |
|--------------|--------|----------------|-----------------|----------------------|-----------------|
| 1 | 5 | 36 | 86 | Honeycomb | See Figure 4-2. |
| | 2 | 12 | 72 | 2- by 12-inch lumber | |
| | 1 | 6 | 30 | 2- by 6-inch lumber | |
| | 1 | 6 | 30 | 3/4-inch plywood | |
| 2 | 7 | 30 | 65 | Honeycomb | See Figure 4-3. |
| | 2 | 20 | 30 | Honeycomb | |
| | 4 | 20 | 30 | 3/4-inch plywood | |
| 3 | 7 | 36 | 65 | Honeycomb | See Figure 4-4. |
| 4 | 6 | 36 | 65 | Honeycomb | See Figure 4-5. |
| | 4 | 12 | 18 | Honeycomb | |
| | 4 | 12 | 18 | 3/4-inch plywood | |
| 5 | 8 | 36 | 65 | Honeycomb | See Figure 4-6. |
| 6 | 2 | 18 | 36 | Honeycomb | See Figure 4-7. |
| 7 | 2 | 18 | 36 | Honeycomb | See Figure 4-7. |
| 8 | 2 | 18 | 36 | Honeycomb | See Figure 4-7. |
| 9 | 2 | 18 | 36 | Honeycomb | See Figure 4-7. |

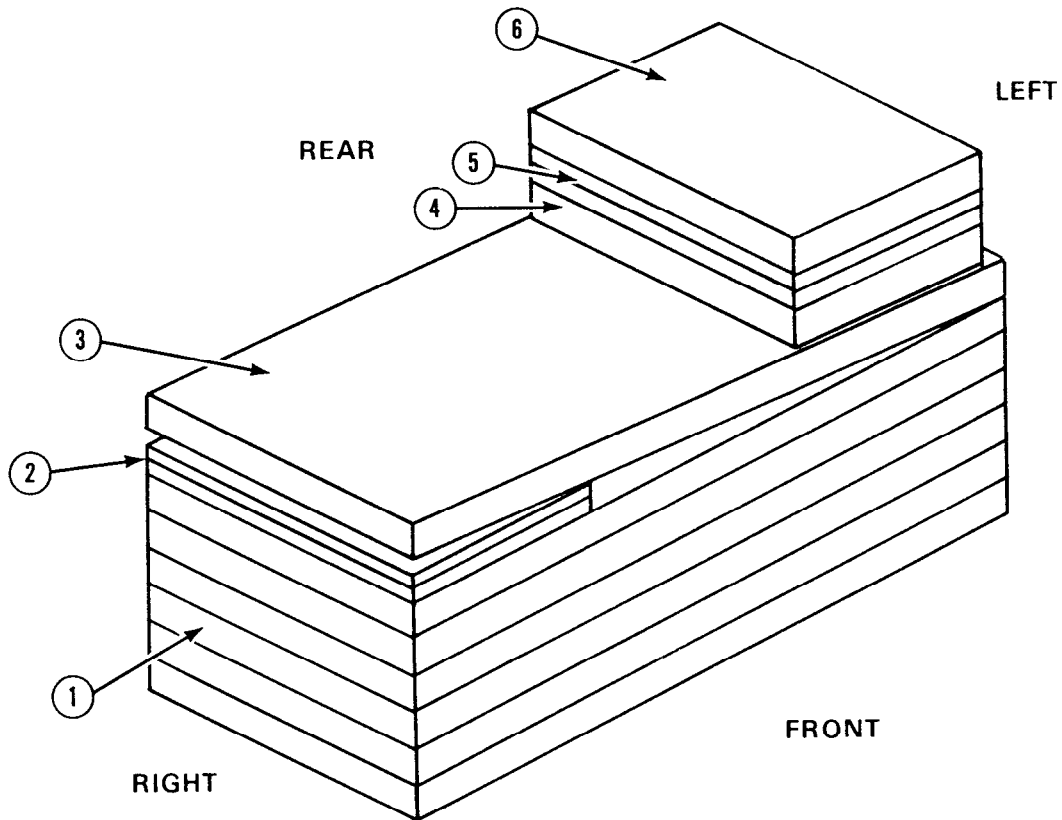
Note: This drawing is not drawn to scale.



- ① Place five 36- by 86-inch pieces of honeycomb as the base.
- ② Center two 2- by 12- by 72-inch pieces of lumber together, 10 inches from the front of the base.
- ③ Center a 2- by 6- by 30-inch piece of lumber 2 inches from the 2- by 12- by 72-inch pieces of lumber.
- ④ Place a 3/4- by 6- by 30-inch piece of plywood on top of the 2- by 6- by 30-inch piece of lumber.

Figure 4-2. Honeycomb stack 1 prepared

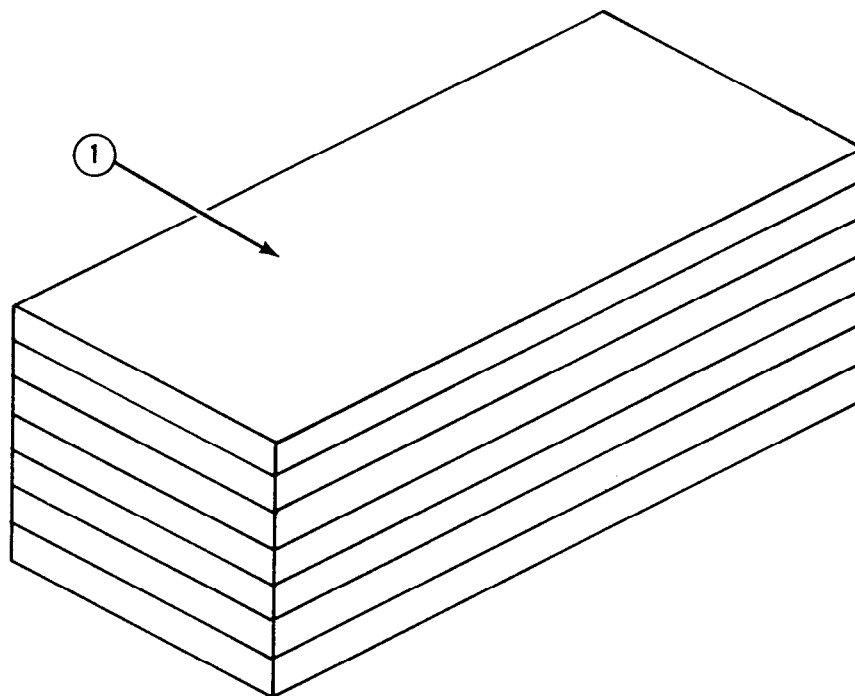
Note: This drawing is not drawn to scale.



- ① Place six 30- by 65-inch pieces of honeycomb as the base.
- ② Place two 3/4- by 20- by 30-inch pieces of plywood flush with the right edge of the base.
- ③ Place a 30- by 65-inch piece of honeycomb on top of the plywood and base.
- ④ Place a 20- by 30-inch piece of honeycomb 3 inches from the left edge of the stack.
- ⑤ Place two 3/4- by 20- by 30-inch pieces of plywood on top of the 20- by 30-inch piece of honeycomb.
- ⑥ Place a 20- by 30-inch piece of honeycomb on top of the 3/4- by 20- by 30-inch piece of plywood.

Figure 4-3. Honeycomb stack 2 prepared

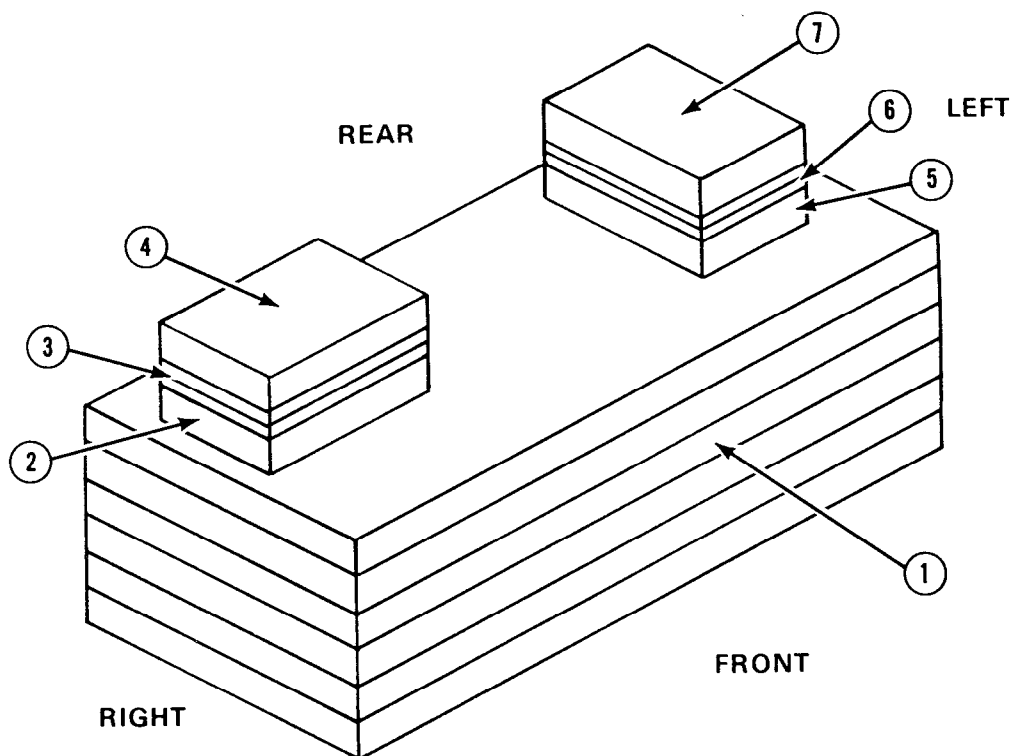
Note: This drawing is not drawn to scale.



① Place seven 36- by 65-inch pieces of honeycomb to form the stack.

Figure 4-4. Honeycomb stack 3 prepared

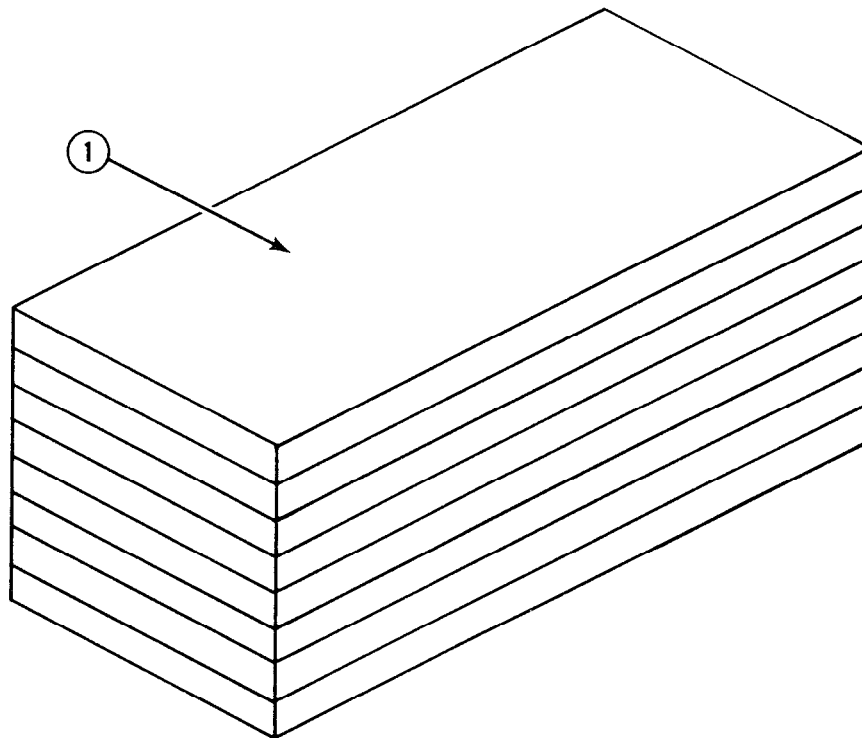
Note: This drawing is not drawn to scale.



- ① Place six 36- by 65-inch pieces of honeycomb as the base.
- ② Place an 18- by 12-inch piece of honeycomb 3 inches from the right edge of the base and 8 inches from the rear edge of the base.
- ③ Place two 3/4- by 18- by 12-inch pieces of plywood on top of the 18- by 12-inch piece of honeycomb.
- ④ Place an 18- by 12-inch piece of honeycomb on top of the 3/4- by 18- by 12-inch pieces of plywood.
- ⑤ Place a 12- by 18-inch piece of honeycomb 5 inches from the left edge of the base and 4 inches from the rear edge of the base.
- ⑥ Place two 3/4- by 12- by 18-inch pieces of plywood on top of the 12- by 18-inch piece of honeycomb.
- ⑦ Place a 12- by 18-inch piece of honeycomb on top of the 3/4- by 12- by 18-inch pieces of plywood.

Figure 4-5. Honeycomb stack 4 prepared

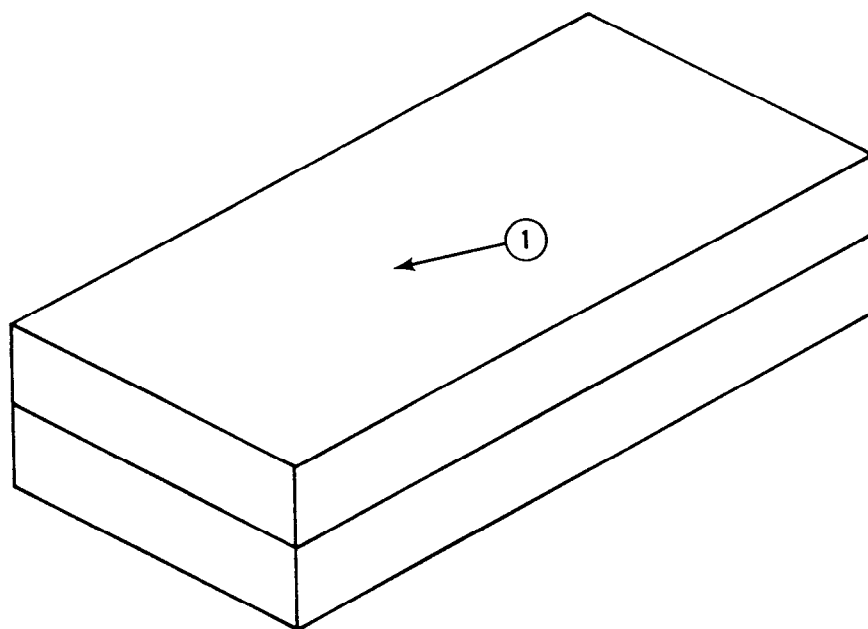
Note: This drawing is not drawn to scale.



- ① Place eight 36- by 65-inch pieces of honeycomb to form the stack.

Figure 4-6. Honeycomb stack 5 prepared

Note: This drawing is not drawn to scale.



- ① Place two 18- by 36-inch pieces of honeycomb to form the stack.

Figure 4-7. Honeycomb stacks 6, 7, 8, and 9 prepared

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.

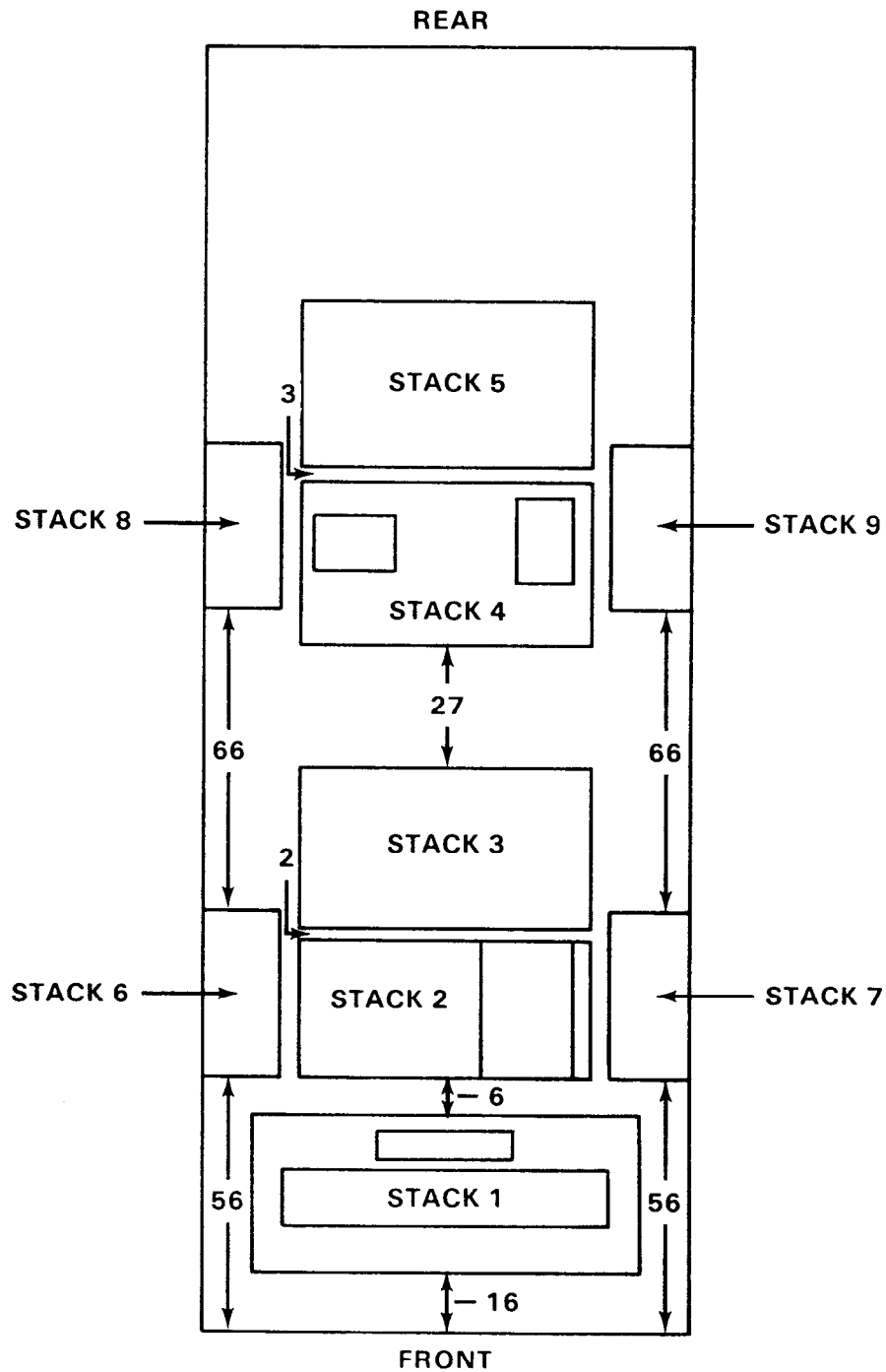
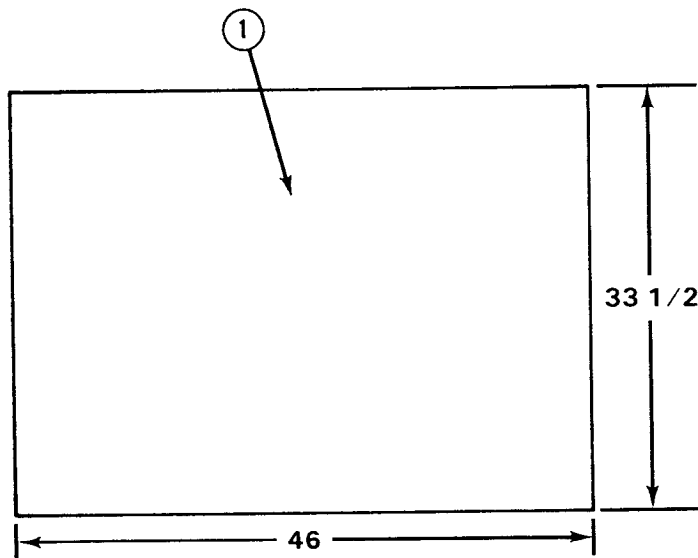


Figure 4-8. Honeycomb stacks positioned on platform

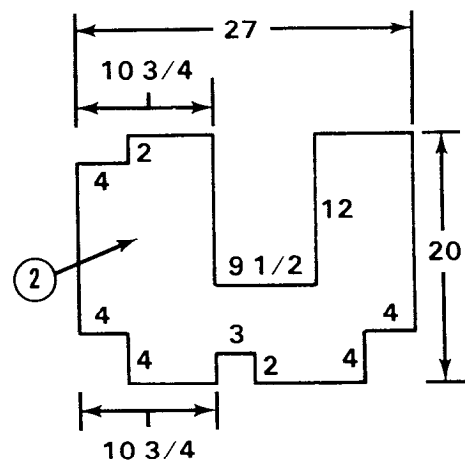
4-4. Building and Positioning Frame Supports

a. Build the front frame support as shown in Figures 4-9 and 4-10. Build the rear frame support as shown in Figures 4-11 and 4-12.

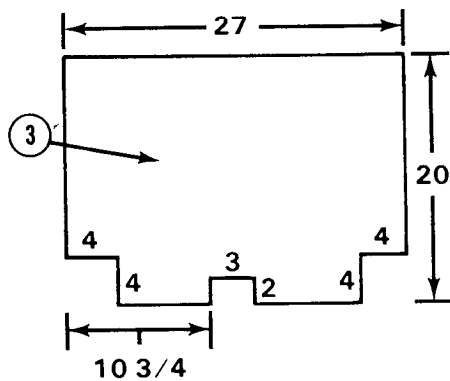
Notes: 1. These drawings are not drawn to scale.
2. All measurements are given in inches.



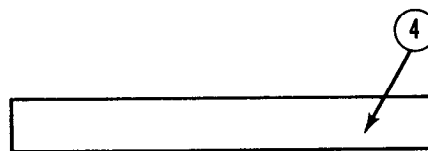
PLYWOOD
(3 each) 3/4- X 33 1/2- X 46-INCH



PLYWOOD
(3 each) 3/4- X 20- X 27-INCH



PLYWOOD
(3 each) 3/4- X 20- X 27-INCH



LUMBER
(1 each) 4- X 4- X 34-INCH



LUMBER
(1 each) 4- X 4- X 46-INCH

Figure 4-9. Pieces for front frame support

- Notes: 1. This drawing is not drawn to scale.
2. Use 6d and 16d nails.

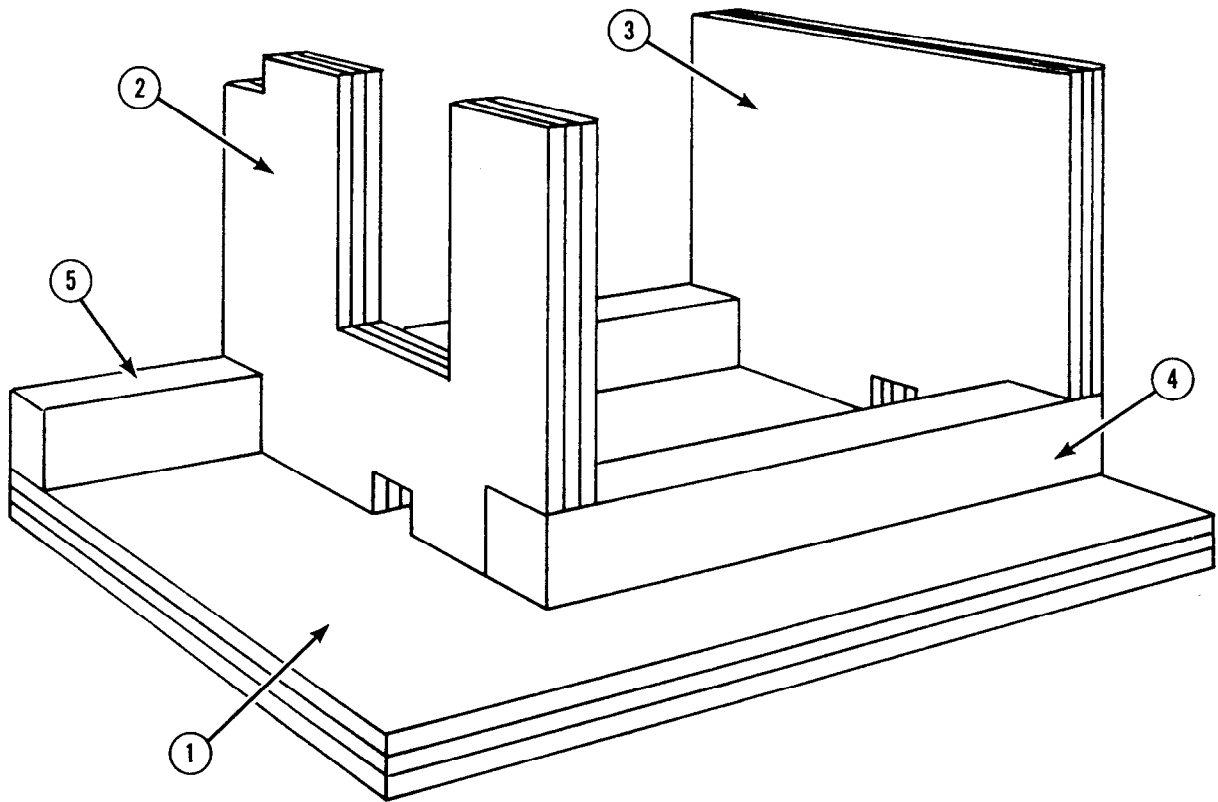
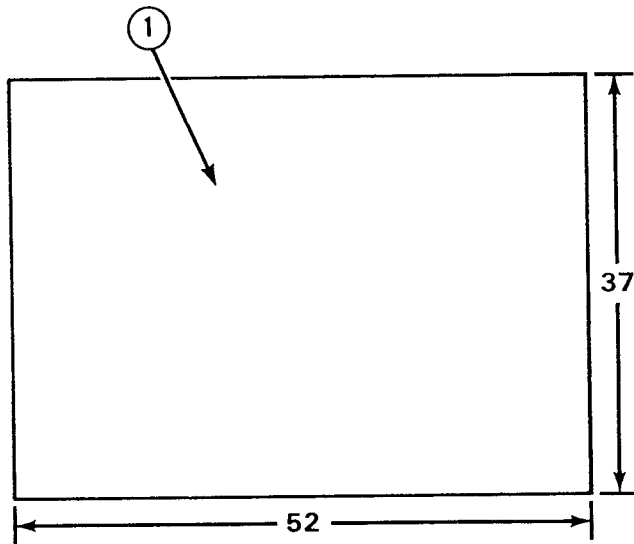
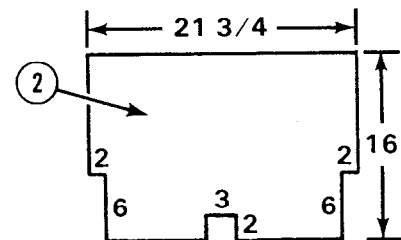


Figure 4-10. Front frame support built

- Notes: 1. These drawings are not drawn to scale.
2. All measurements are given in inches.



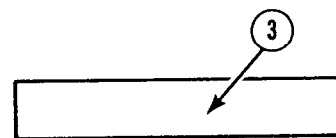
PLYWOOD
(2 each) 3/4- X 37- X 52-INCH



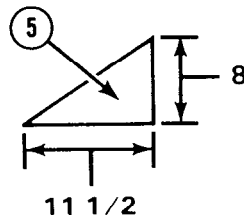
PLYWOOD
(6 each) 3/4- X 16- X 21 3/4-INCH



LUMBER
(2 each) 2- X 6- X 52-INCH



LUMBER
(2 each) 2- X 6- X 29 1/2-INCH



LUMBER
(8 each) 2- X 8- X 11 1/2-INCH

Figure 4-11. Pieces for rear frame support

- Notes: 1. This drawing is not drawn to scale.
2. Use 6d and 16d nails.
3. All measurements are given in inches.

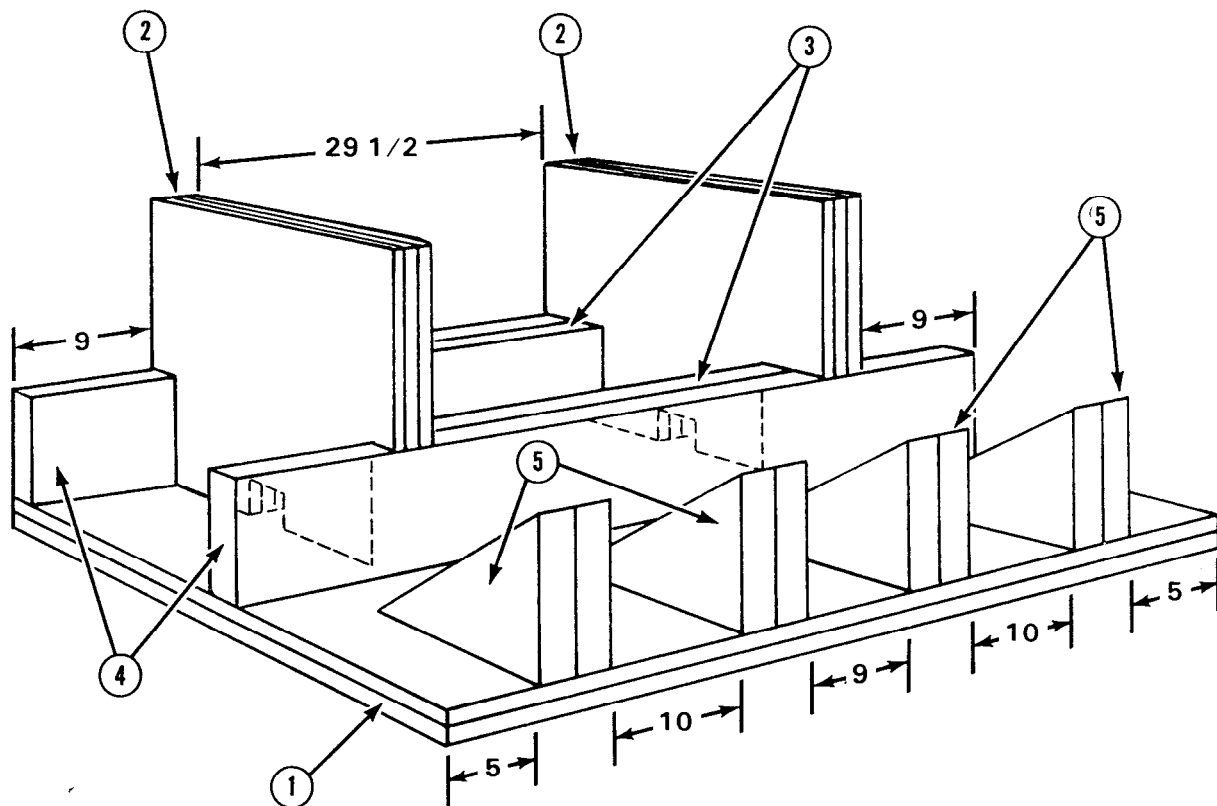
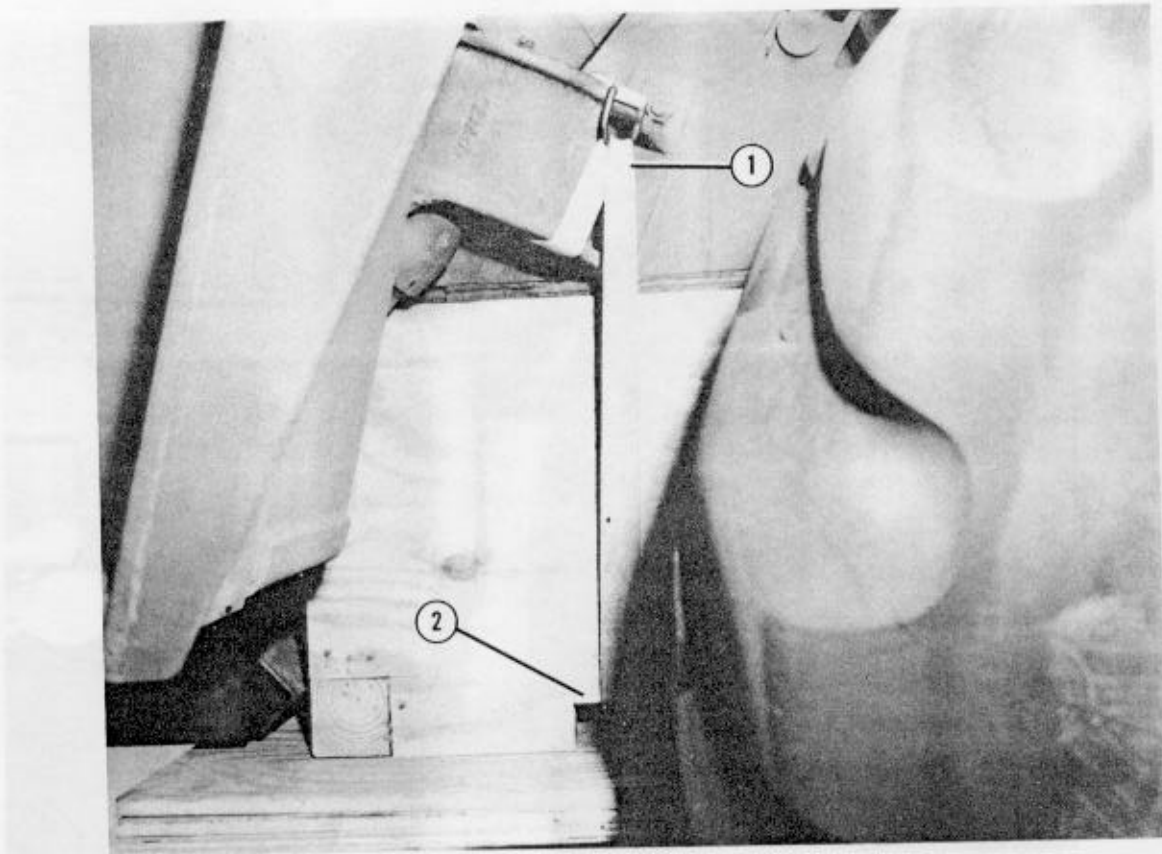


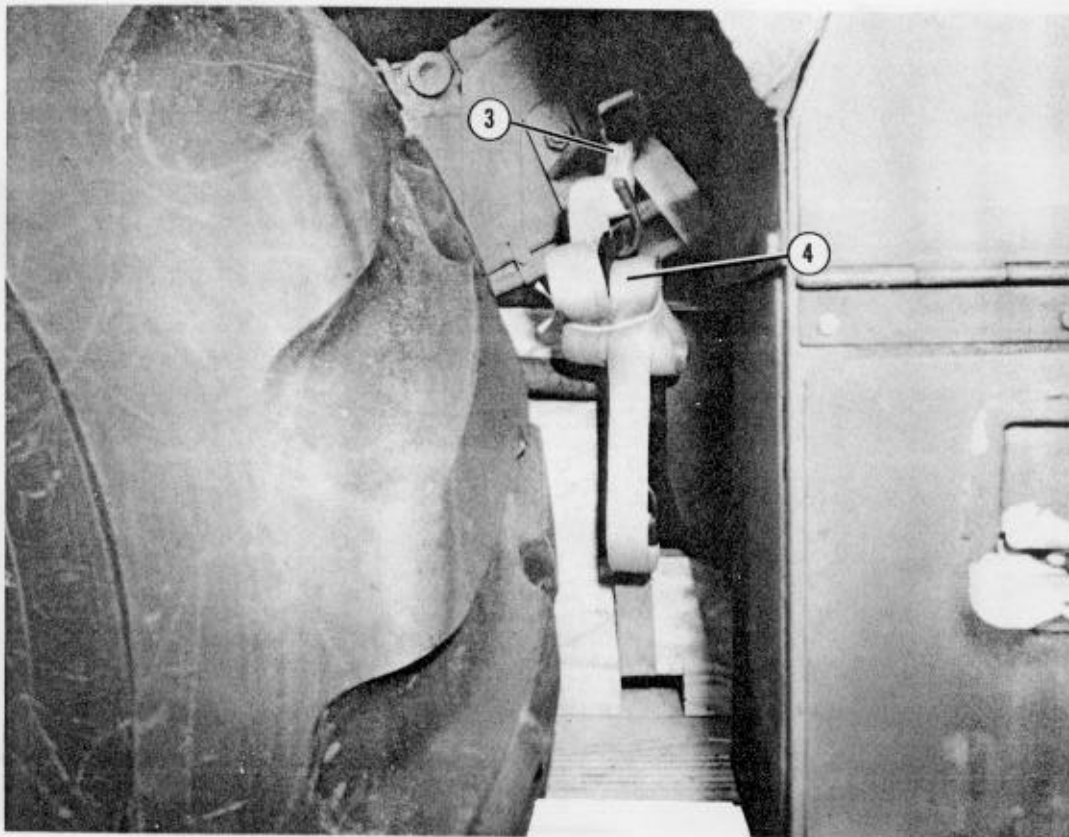
Figure 4-12. Rear frame support built

b. Turn the front wheels to the left. Extend the forks to lift the front wheels about 2 inches. Slide the front frame support into position from the right side. Secure the support in place as shown in Figure 4-13.



- ① Pass a 15-foot lashing around the right cylinder guard and through its own D-ring.
- ② Pass the 15-foot lashing through the cutouts of the front frame support, from right to left.

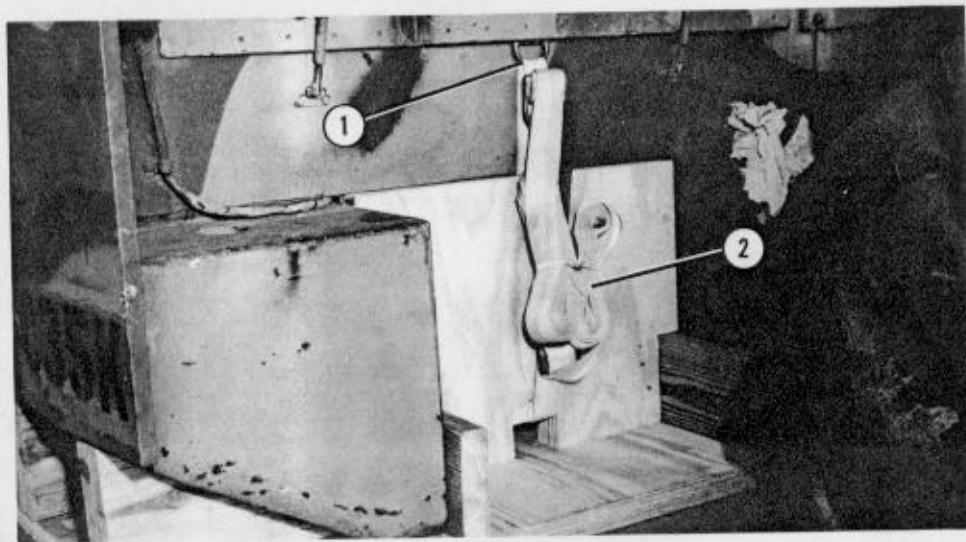
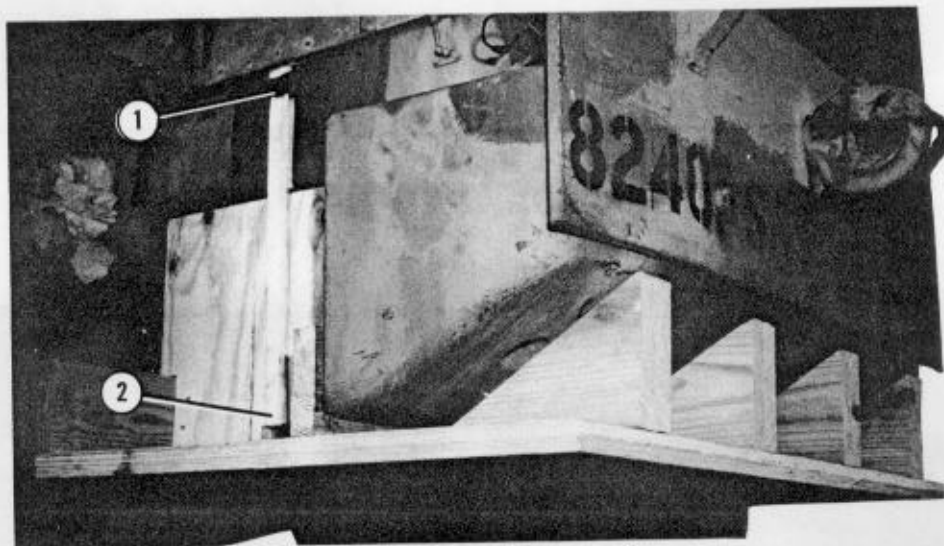
Figure 4-13. Front frame support installed



- ③ Pass a 15-foot lashing around the left cylinder guard and through its own D-ring.
- ④ Secure the two lashings with two D-rings and a load binder.

Figure 4-13. Front frame support installed (continued)

c. Place the rear frame support under the forklift with the rear of the frame support flush with the rear of the forklift. Secure the rear frame support as shown in Figure 4-14.



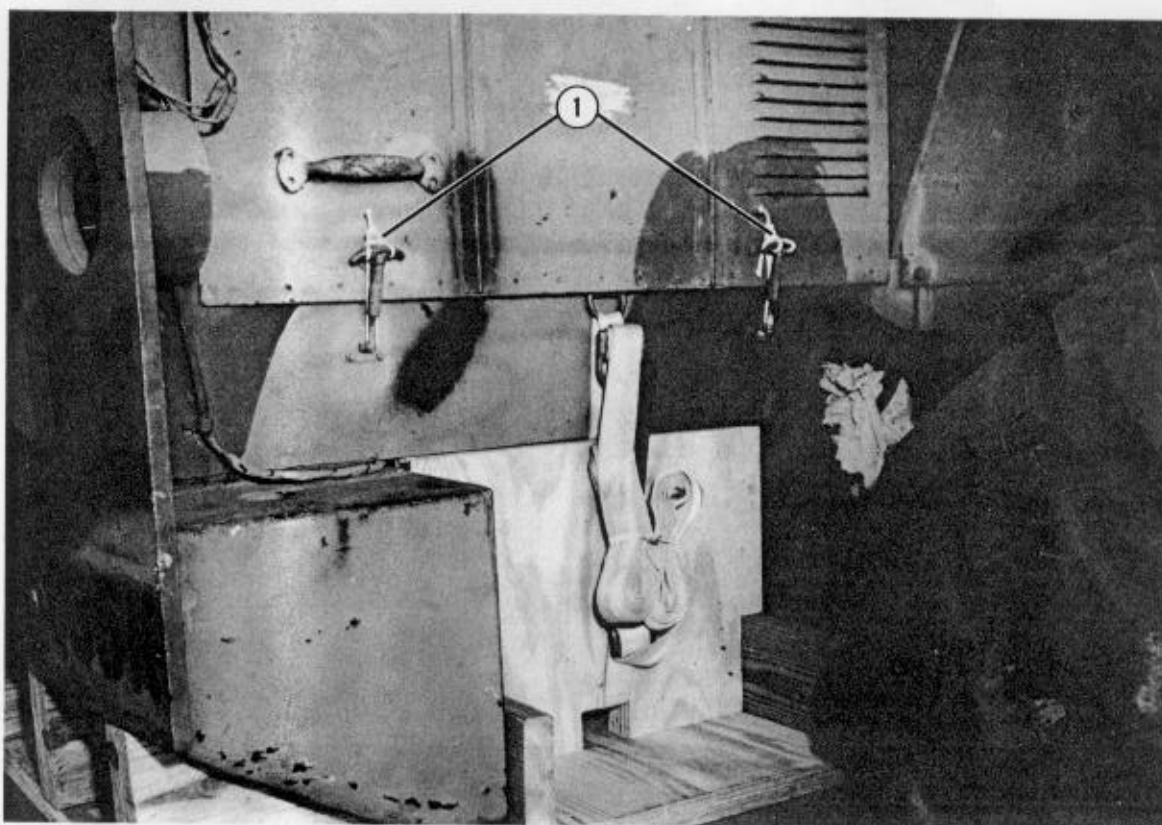
- ① Pass a 15-foot lashing around the mainframe and through its own D-ring on both sides of the forklift.
- ② Pass the free end of the 15-foot lashing on the left mainframe through the slots in the frame support and attach the lashings with two D-rings and a load binder.

Figure 4-14. Rear frame support installed

4-5. Preparing Forklift

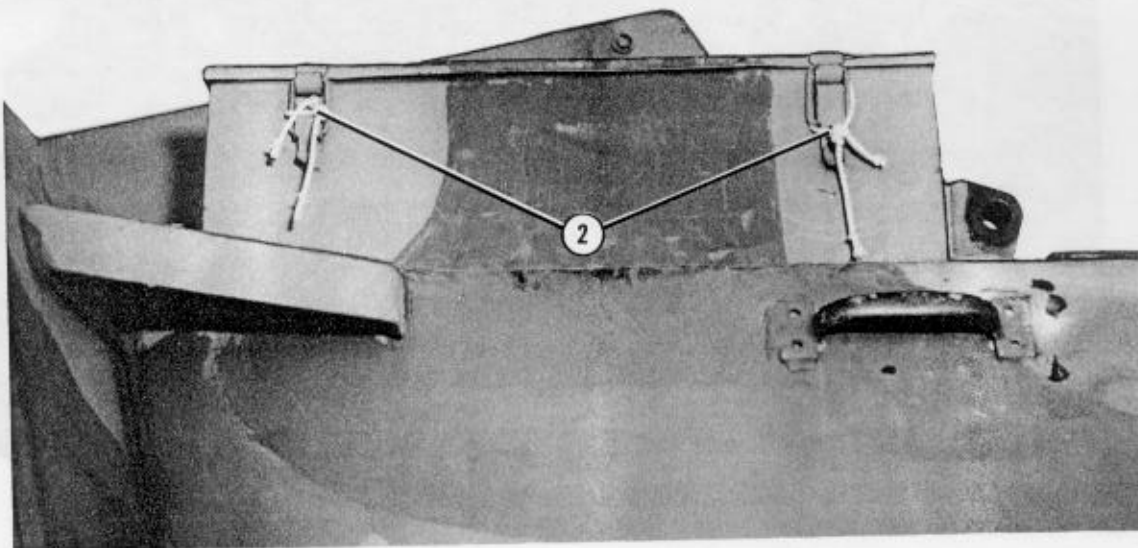
Prepare the forklift as described below and as shown in Figure 4-15.

- a. Make sure the fuel tank is not more than 3/4 full.
- b. Make sure the front tires are inflated to 30 psi and the rear tires to 20 psi of air pressure.
- c. Remove the ROPS guard, the air intake stack with support bracket, and the steering wheel.



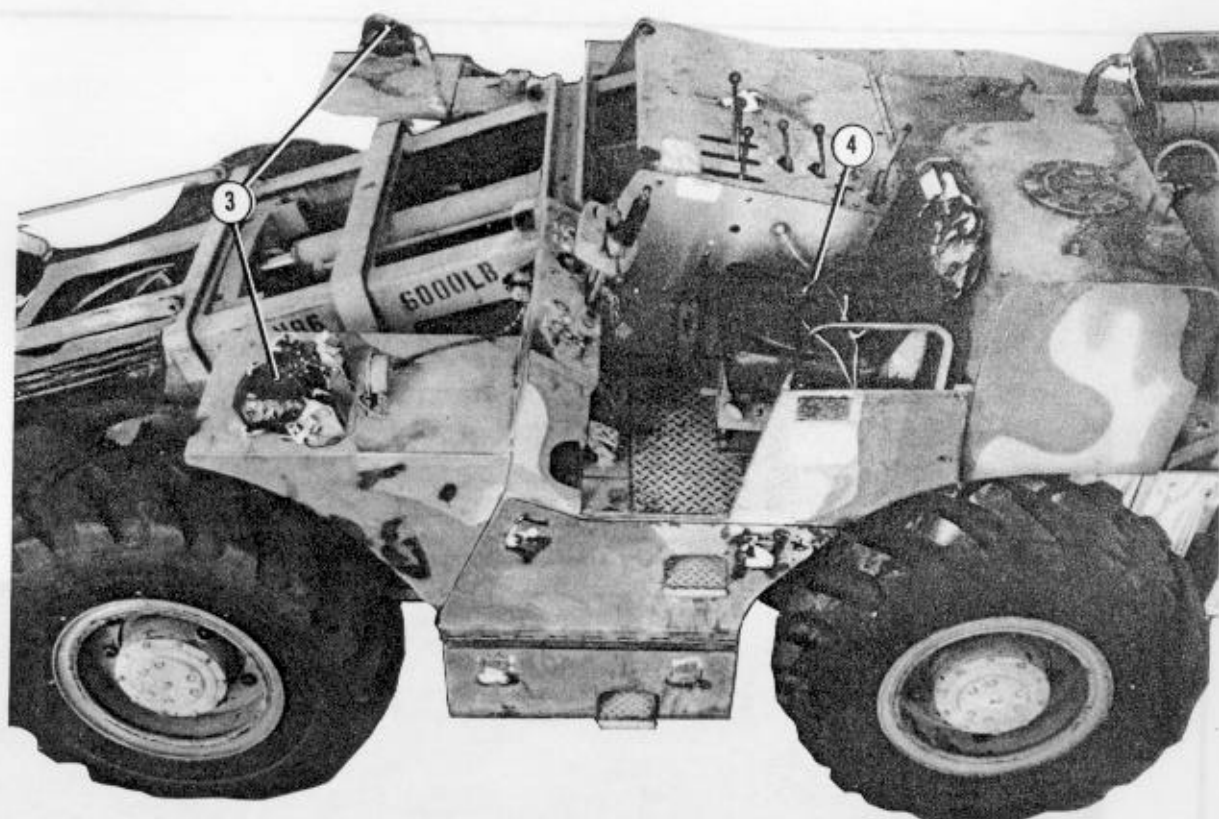
- ① Safety the engine compartment door with type III nylon cord.

Figure 4-15. Forklift prepared



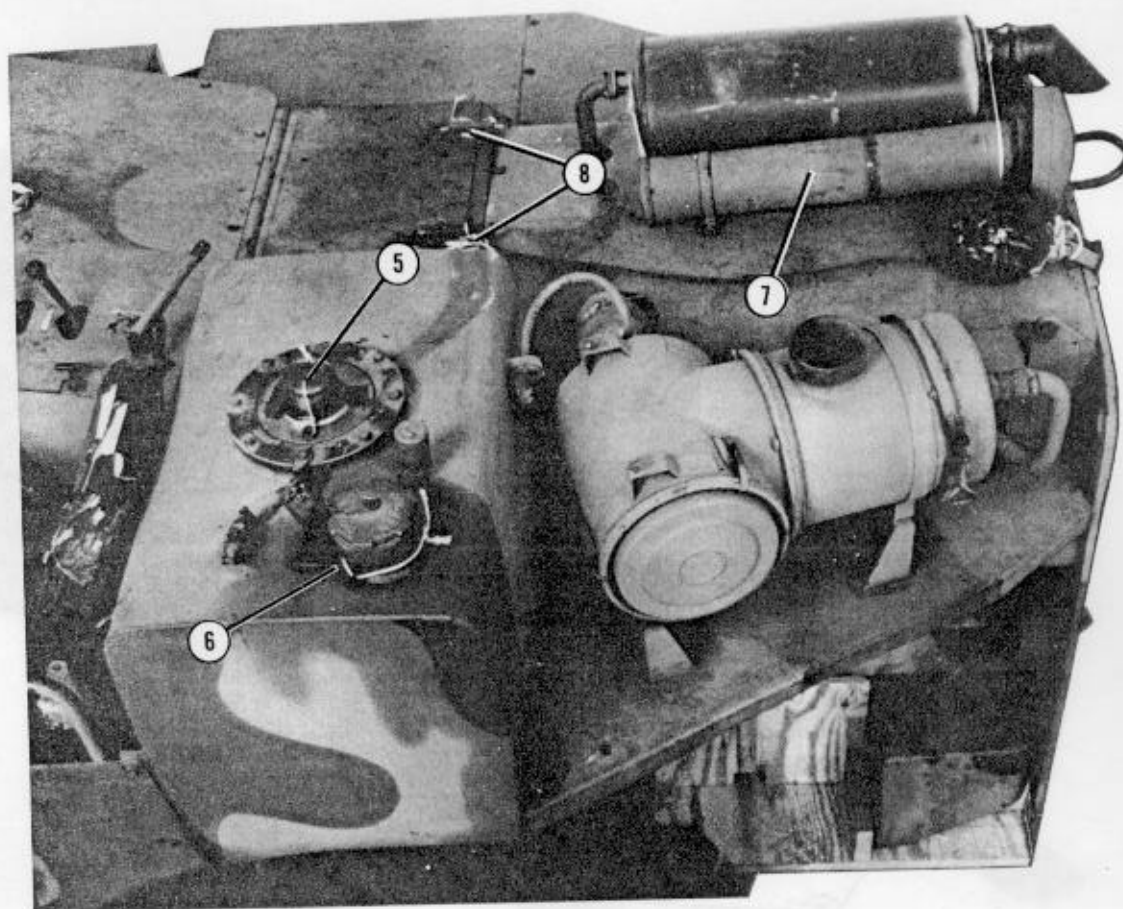
- ② Safety the storage box latches with type III nylon cord.

Figure 4-15. Forklift prepared (continued)



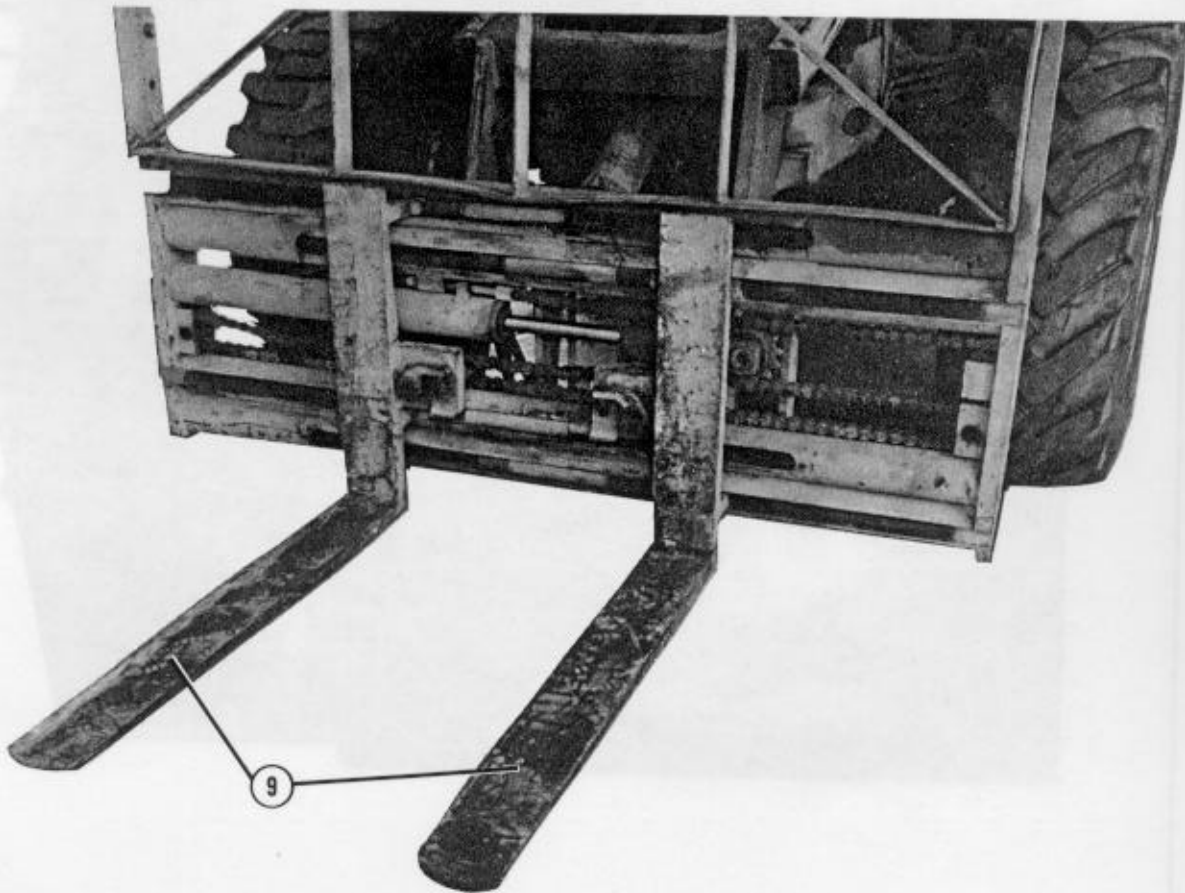
- ③ Pad the beam lights with cellulose wadding and tape in place. Turn the lights down against the forklift.
- ④ Secure the steering wheel to the seat with type III nylon cord.

Figure 4-15. Forklift prepared (continued)



- ⑤ Remove the bracket above the hydraulic warning indicator. Safety the indicator with tape and type III nylon cord.
- ⑥ Secure the hydraulic warning indicator bracket to the hydraulic fluid filler cap with tape and type III nylon cord.
- ⑦ Remove the air intake stack, lay it beside the muffler, and tie it in place with type III nylon cord.
- ⑧ Safety the battery box with type III nylon cord.

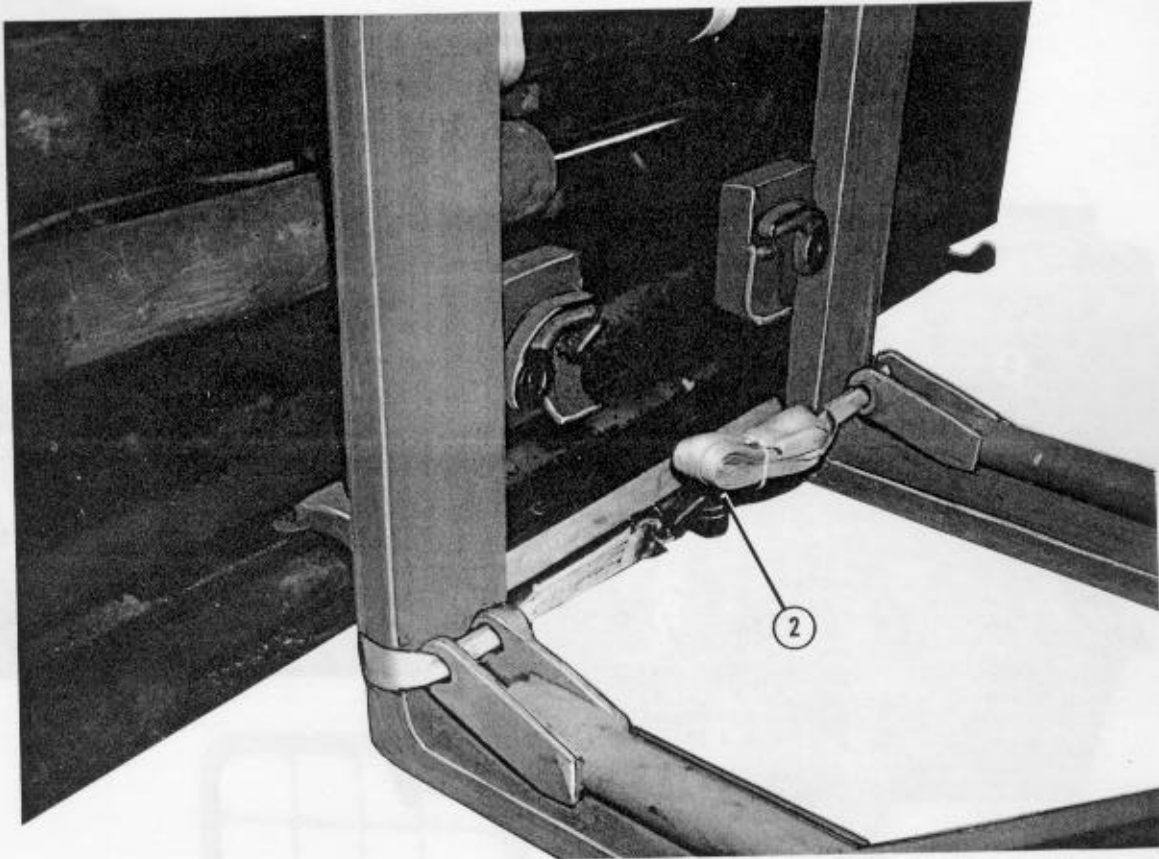
Figure 4-15. Forklift prepared (continued)



- 9 Adjust the forks on the carriage to 25 inches between forks and lowered 4 to 6 inches from the floor. Retract the forks until the fork extension brace makes contact with the carriage frame.

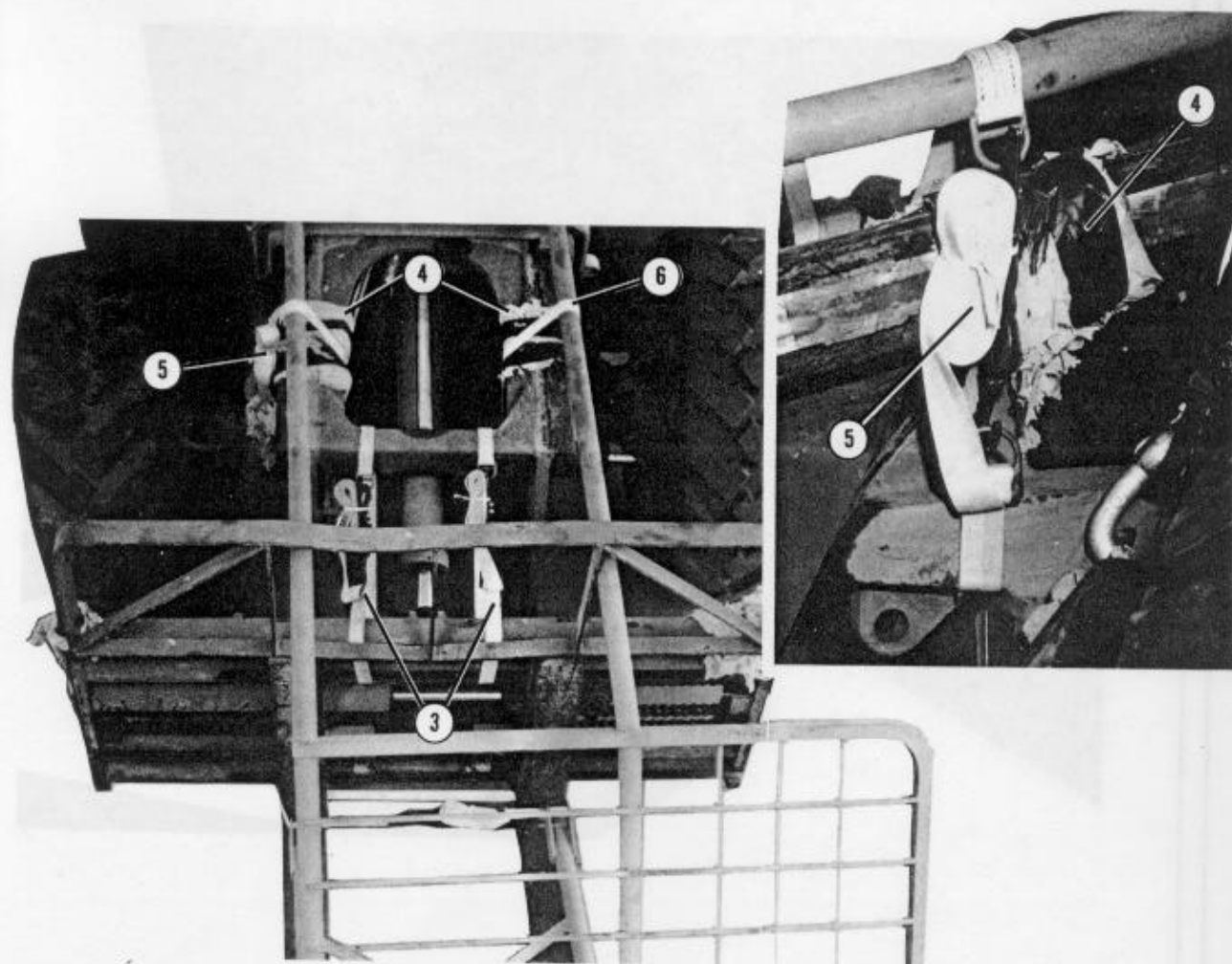
Figure 4-15. Forklift prepared (continued)

d. Stow the ROPS as shown in Figure 4-16.



- ① Pass the rear support members of the ROPS through the carriage backrest. Lay the guard support members on the forks (not shown).
- ② Pass a 15-foot lashing through the pin holes in the ROPS support members and around the forks. Secure the ends with a D-ring and load binder.

Figure 4-16. ROPS secured to forks



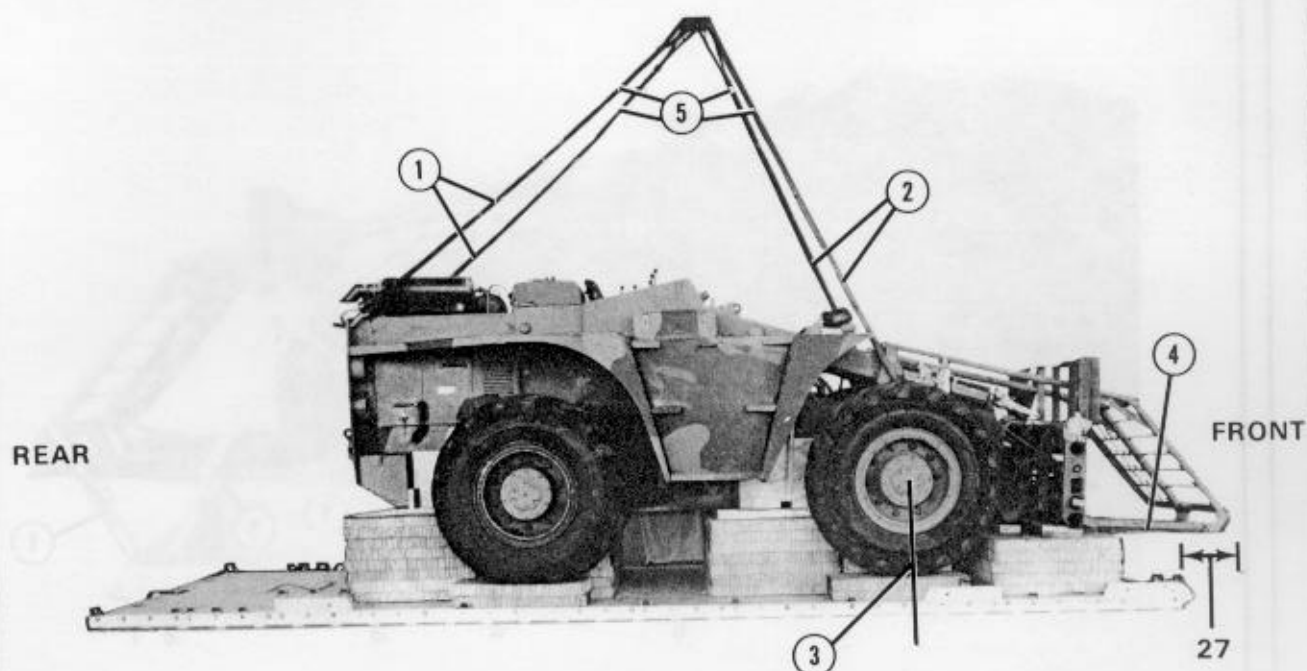
- ③ Secure the fork carriage to the fork extension brace with two 15-foot lashings.
- ④ Pad the left and right fork boom with cellulose wadding and tape in place.
- ⑤ Pass a 15-foot lashing around the right rear support member, the padded fork boom, and the right frame rail. Secure the ends with a D-ring and load binder.
- ⑥ Repeat step 5 for the left rear support member.

Figure 4-16. ROPS secured to forks (continued)

4-6. Installing Lifting Slings and Positioning Forklift

Install the lifting slings and position the forklift on the platform as shown and described in Figure 4-17.

Note: Measurement is given in inches.

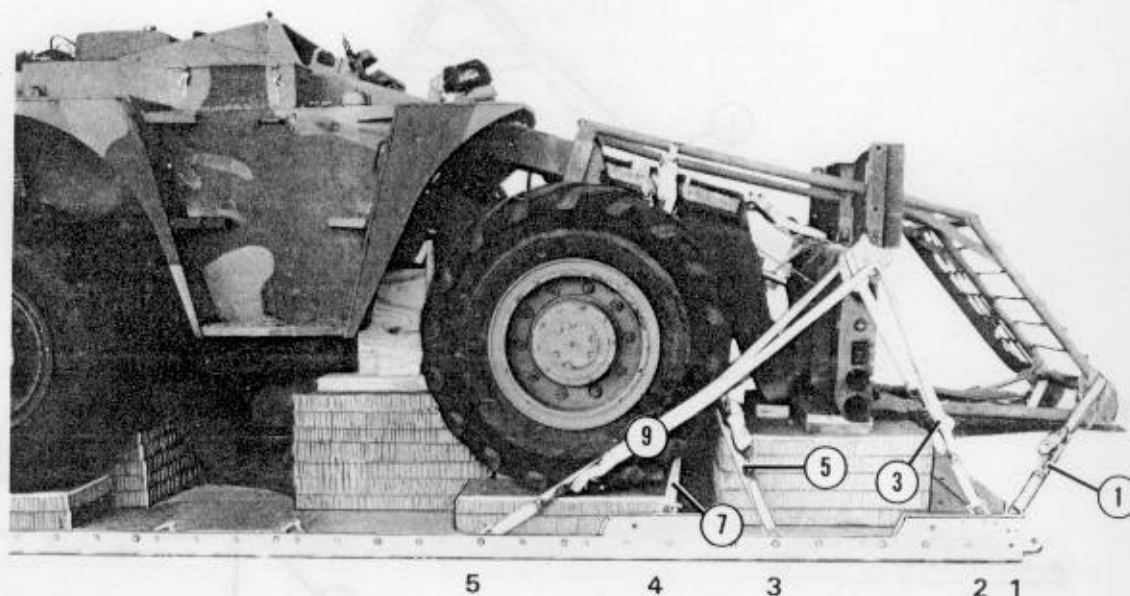


- ① Attach an 11-foot (4-loop), type XXVI nylon sling to each rear lifting point with a large clevis.
 - ② Attach an 11-foot (4-loop), type XXVI nylon sling to each front lifting point with a large clevis.
- Note:** Make sure the forks are 30 inches above the ground before the truck is positioned.
- ③ Set the forklift on the platform with the center of the front wheels 74 inches from the front edge of the platform.
 - ④ Lower the forks on top of the honeycomb stacks so the fork carriage is centered on the 12- by 72-inch lumber of stack 1. The forks should overhang the front of the platform 27 inches.
 - ⑤ Remove the lifting slings after forklift is positioned.

Figure 4-17. Forklift positioned

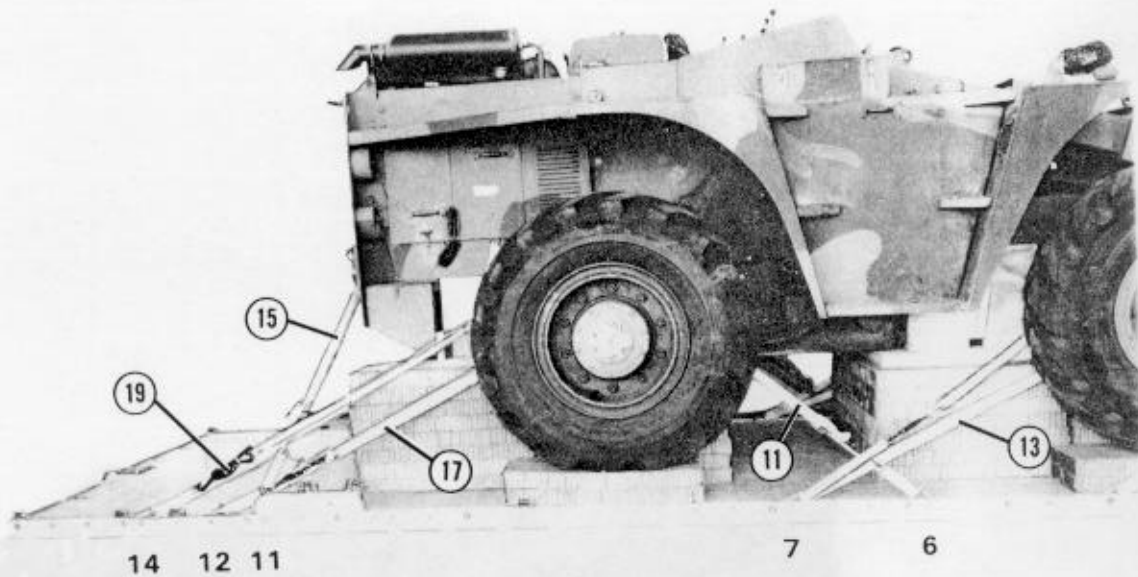
4-7. Lashing Forklift

Lash the forklift to the platform with twenty 15-foot tie-down assemblies. Install the lashings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 4-18 and 4-19.



| Lashing Number | Tie-down Clevis Number | Instructions |
|----------------|------------------------|---|
| 1 | 1 | Pass lashing: |
| 2 | 1A | Around operator's guard and fork, right side. |
| 3 | 2 | Around operator's guard and fork, left side. |
| 4 | 2A | Around padded fork carriage, right side. |
| 5 | 3 | Around padded fork carriage, left side. |
| 6 | 3A | Through padded front lifting point, right side. |
| 7 | 4 | Through padded front lifting point, left side. |
| 8 | 4A | Around front mainframe cross brace, right side. |
| 9 | 5 | Around front mainframe cross brace, left side. |
| 10 | 5A | Around padded fork carriage, right side. |
| | | Around padded fork carriage, left side. |

Figure 4-18. Lashings 1 through 10 installed



| Lashing Number | Tie-down Clevis Number | Instructions |
|----------------|------------------------|---|
| 11 | 6 | Pass lashing: |
| 12 | 6A | Through padded rear tie-down point, right side. |
| 13 | 7 | Through padded rear tie-down point, left side. |
| 14 | 7A | Around front axle, right side. |
| 15 | 11 | Around front axle, left side. |
| 16 | 11A | Through towing pintle. |
| 17 | 12 | Through towing pintle. |
| 18 | 12A | Around rear axle, right side. |
| 19 | 14 | Around rear axle, left side. |
| 20 | 14A | Through padded rear tie-down point, right side. |
| | | Through padded rear tie-down point, left side. |

Figure 4-19. Lashings 11 through 20 installed

4-8. Covering Load

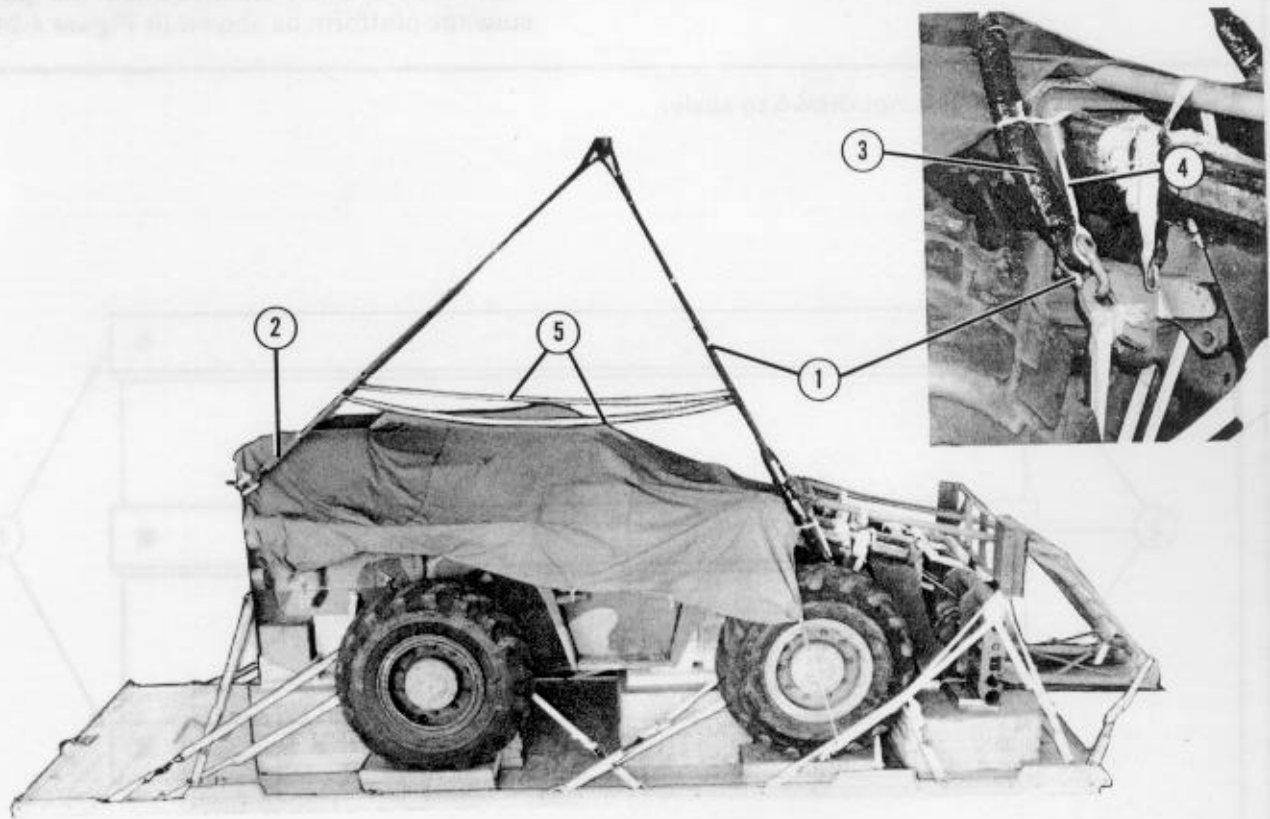
Cover the load from the rear of the forklift to the front fenders with a 12- by 12-foot piece of cotton duck cloth. Tie it to convenient places on the forklift with type III nylon cord as shown in Figure 4-20.



Figure 4-20. Load covered

4-9. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and the deadman's tie as shown in Figure 4-21.



- ① Attach an 11-foot (4-loop), type XXVI nylon sling to each front lifting point with a screw pin clevis.
- ② Attach an 11-foot (4-loop), type XXVI nylon sling to each rear lifting point with a screw pin clevis.
- ③ Pad the front suspension slings with 8- by 24-inch pieces of felt at the screw pin clevis and tape in place.
- ④ Safety the front suspension slings to the forklift with a length of 1/2-inch tubular nylon webbing.
- ⑤ Safety the suspension slings with a deadman's tie according to FM 10-500-2/TO 13C7-1-5.

Figure 4-21. Suspension slings and deadman's tie installed

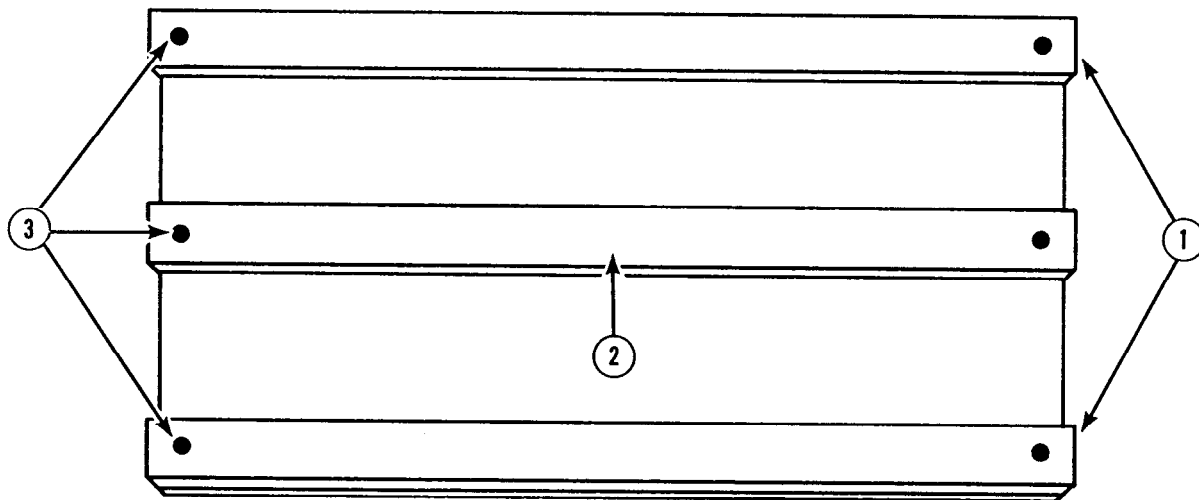
4-10. Building and Positioning Parachute Stowage Platform

a. Build two honeycomb supports with thirty 18- by 48-inch pieces of honeycomb, fifteen pieces for each stack.

b. Build a parachute stowage platform as shown in Figure 4-22.

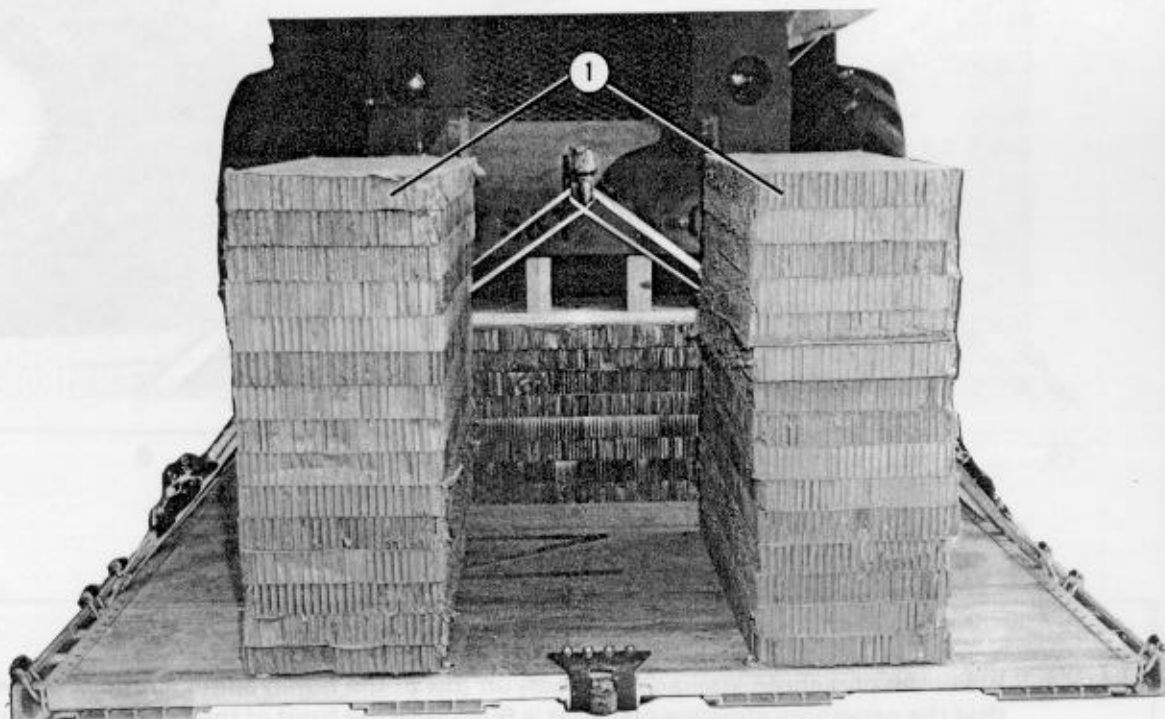
c. Position the honeycomb support as shown in Figure 4-23. Position and lash the parachute stowage platform as shown in Figure 4-24.

Note: This drawing is not drawn to scale.



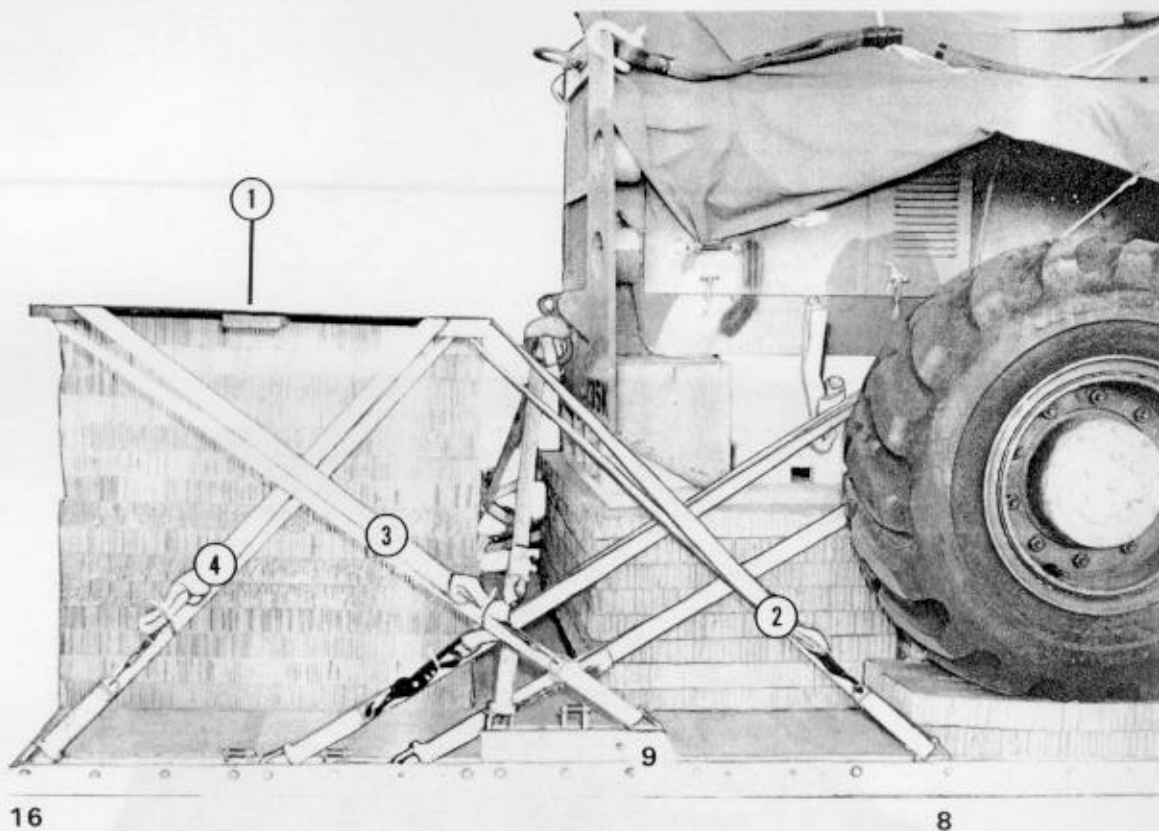
- ① Nail a 2- by 6- by 96-inch piece of lumber to each 96-inch side of a 3/4- by 48- by 96-inch piece of plywood with 8d nails.
- ② Nail an additional 2- by 6- by 96-inch piece of lumber to the center of the plywood with 8d nails.
- ③ Drill a 2-inch hole through each end of each 2- by 6-inch piece of lumber 2 inches in from the plywood edge.

Figure 4-22. Parachute stowage platform built



- ① Place each honeycomb support on the platform 20 inches in from the platform side rails and flush with the rear of the platform.

Figure 4-23. Honeycomb support positioned



- ① Place the parachute stowage platform on top of the honeycomb support. Make sure that the parachute stowage platform is flush with the front of the honeycomb support.
- ② Pass a 15-foot lashing through clevis 8 and through the right front hole of the parachute stowage platform. Secure the ends with a D-ring and load binder.
- ③ Pass a 15-foot lashing through clevis 9 and through the right rear hole of the parachute stowage platform. Secure the ends with a D-ring and load binder.
- ④ Pass a 15-foot lashing through clevis 16 and through the right front hole of the parachute stowage platform. Secure the ends with a D-ring and load binder.
- ⑤ Repeat steps 2, 3, and 4 for the left side using clevises 8A, 9A, and 16A (not shown).

Figure 4-24. Parachute stowage platform secured

4-11. Stowing Cargo Parachutes *MSC JND 95*

- a. Prepare and stow six G-11~~B~~^C cargo parachutes on the parachute stowage platform according to FM 10-500-2/TO 13C7-1-5.
- b. Install the parachute restraint straps according to FM 10-500-2/TO 13C7-1-5 using clevises 10, 13, 15, 10A, 13A, and 15A.
- c. Install the multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

4-12. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as given below.

- a. Install the actuator brackets to the front mounting holes on the left platform side rail.

- b. Attach a 24-foot cable to the actuator. Run the cable toward the rear. Safety the cable to a convenient point with type I, 1/4-inch cotton webbing.

- c. Install a 9-foot (2-loop or 4-loop), type XXVI nylon webbing sling as the deployment line according to FM 10-500-2/TO 13C7-1-5.

4-13. Installing Release System

Install an M-2 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 4-25.

4-14. Installing Provisions for Emergency Restraints

Install the provisions for the emergency restraints on the load according to FM 10-500-2/TO 13C7-1-5.

4-15. Placing Extraction Parachutes

Place the extraction parachutes as described below:

a. C-130 Aircraft. Place two 28-foot cargo extraction parachutes; a 60-foot (6-loop), type XXVI nylon webbing extraction line; and a four-point link assembly on the load for installation in the aircraft.

b. C-141 Aircraft. Place one 28-foot (heavy-duty) cargo extraction parachute; a 140-foot (3-loop), type XXVI nylon webbing extraction line; and a four-point link assembly on the load for installation in the aircraft.

4-16. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 4-26. Complete DD Form 1387-2, and securely attach it to the

load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

4-17. Rigged Load Lifting Slings

Install lifting slings as described below to lift the rigged load onto the transport vehicle.

a. Attach an 11-foot (4-loop), type XXVI nylon sling to each front lifting point with a large clevis.

b. Attach an 11-foot (4-loop), type XXVI nylon sling to each rear suspension link on the platform with a large clevis.

4-18. Equipment Required

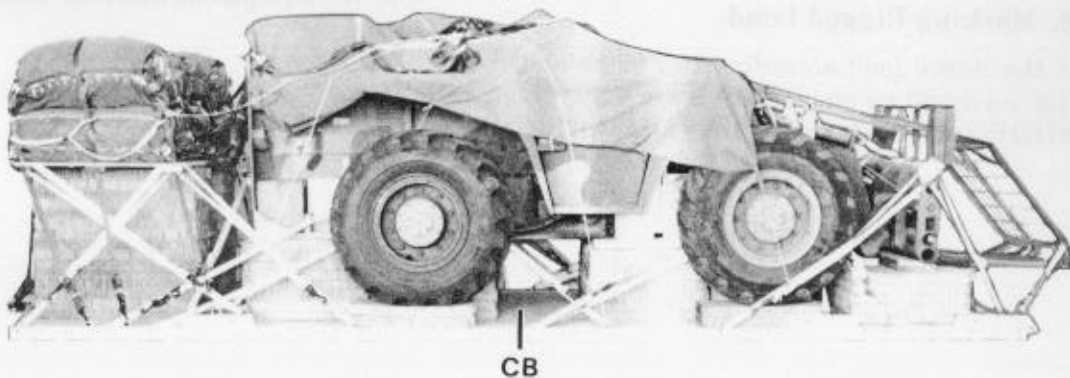
Use the equipment listed in Table 4-2 to rig this load.

CAUTION

**Make the final rigger inspection required by FM 10-500-2/
TO 13C7-1-5 before the load leaves the rigging site.**

NOTICE OF EXCEPTION

The rigged height is greater than 100 inches. The
location of the maximum height is behind the seat.

**RIGGED LOAD DATA**

| | | |
|----------------------------------|----------------------|----------------|
| Weight: | Load shown | 28,660 pounds |
| | Maximum load allowed | 29,500 pounds |
| Height | | 100 3/4 inches |
| Width | | 108 inches |
| Length | | 343 inches |
| Overhang: | Front | 27 inches |
| | Rear | 18 inches |
| CB (from front edge of platform) | | 141 inches |
| Extraction system | | EFTC |

Figure 4-26. 6,000-pound capacity forklift truck rigged on a type V platform for low-velocity airdrop

Table 4-2. Equipment required for rigging the 6,000-pound capacity forklift truck on a type V platform for low-velocity airdrop

| National Stock Number | Item | Quantity |
|-----------------------|--|-------------|
| 8040-00-273-8713 | Adhesive, paste, 1-gal | As required |
| 1670-00-568-0323 | Band, rubber, retainer | As required |
| 4030-00-090-5354 | Clevis, suspension, 1-in (large) | 4 |
| | Clevis: | |
| 4030-00-432-2516 | Screw-pin | 4 |
| 5306-00-172-9996 | Screw-pin (improved) | 4 |
| 8305-00-242-3593 | Cloth, cotton duck, 60-in | As required |
| 4020-00-240-2146 | Cord, nylon, type III, 550-lb | As required |
| 1670-00-434-5782 | Coupling, airdrop, extraction force transfer w 24-ft cable | 1 |
| 8135-00-664-6958 | Cushioning material, packaging, cellulose wadding | As required |
| 8305-00-958-3685 | Felt, 1/2-in thick | As required |
| 1670-01-183-2678 | Leaf, extraction line | 2 |
| | Link assembly: | |
| 1670-00-006-2752 | Four-point | 1 |
| | Two-point: | |
| 5306-00-435-8994 | Bolt, 1-in diam, 4-in long | (2) |
| 5310-00-232-5165 | Nut, 1-in, hexagonal | (2) |
| 1670-00-003-1954 | Plate, side, 5 1/2-in | (2) |
| 5365-00-007-3414 | Spacer, large | (2) |
| | Lumber: | |
| 5510-00-220-6148 | 2- by 6-in: | |
| | 29 1/2-in | 2 |
| | 30-in | 1 |
| | 52-in | 2 |
| | 96-in | 3 |
| 5510-00-220-6246 | 2- by 8-in: | |
| | 11 1/2-in | 8 |
| 5510-00-220-6250 | 2- by 12-in: | |
| | 72-in | 2 |
| 5510-00-220-6274 | 4- by 4-in: | |
| | 34-in | 1 |
| | 46-in | 1 |
| | Nail, steel wire, common: | |
| 5315-00-010-4657 | 6d | As required |
| 5315-00-010-4659 | 8d | As required |
| 5315-00-010-4663 | 16d | As required |
| 1670-00-753-3928 | Pad, energy-dissipating, honeycomb, | |
| | 3- by 36- by 96-in: | 35 sheets |
| | 12- by 18-in | 4 |
| | 18- by 36-in | 8 |
| | 18- by 48-in | 30 |
| | 20- by 30-in | 2 |
| | 30- by 65-in | 7 |

Table 4-2. Equipment required for rigging the 6,000-pound capacity forklift truck on a type V platform for low-velocity airdrop (continued)

| National Stock Number | Item | Quantity |
|-----------------------|---|-------------|
| | 36- by 65-in | 21 |
| | 36- by 86-in | 5 |
| | Parachute: | |
| | Cargo: | |
| 1670-01-016-7841 | G-11 C C | 6 |
| | Cargo extraction: | |
| 1670-00-262-1797 | 28-ft or | 2 |
| 1670-00-040-8135 | 28-ft, heavy-duty | 2 |
| | Platform, AD, type V, 24-ft: | 1 |
| | Bracket: | |
| 1670-01-162-2375 | Inside EFTA | (1) |
| 1670-01-162-2374 | Outside EFTA | (1) |
| 1670-01-162-2372 | Clevis assembly | (32) |
| 1670-01-162-2376 | Extraction bracket assembly | (1) |
| 1670-01-247-2389 | Suspension link | (4) |
| 1670-01-162-2381 | Tandem link | (2) |
| | Plywood: | |
| 5530-00-128-4981 | 3/4-in: | |
| | 6- by 30-in | 1 |
| | 12- by 18-in | 4 |
| | 16- by 21 3/4-in | 6 |
| | 20- by 27-in | 6 |
| | 20- by 30-in | 4 |
| | 33 1/2- by 46-in | 3 |
| | 37- by 52-in | 2 |
| | 48- by 96-in | 1 |
| 1670-01-097-8817 | Release, cargo parachute, M-2 | 1 |
| | Sling, cargo airdrop: | |
| | For deployment line: | |
| 1670-01-062-6304 | 9-ft (2-loop), type XXVI nylon webbing or | 1 |
| 1670-01-062-6305 | 9-ft (4-loop), type XXVI nylon webbing | 1 |
| | For lifting: | |
| 1670-01-062-6310 | 11-ft (4-loop), type XXVI nylon webbing | 4 |
| | For extraction: | |
| 1670-01-064-4454 | 60-ft (6-loop), type XXVI nylon webbing (C-130 aircraft) | 1 |
| 1670-01-107-7651 | 140-ft (3-loop), type XXVI nylon webbing (C-141 aircraft) | 1 |
| | For riser extensions: | |
| 1670-01-062-6311 | 120-ft (2-loop), type XXVI nylon webbing | 6 |
| | Strap: | |
| 1670-00-040-8219 | Parachute release, multicut comes w 3 knives | 2 |
| 7510-00-266-6710 | Tape, masking, 2-in | As required |
| 1670-00-937-0271 | Tie-down assembly, 15-ft | 39 |

Table 4-2. Equipment required for rigging the 6,000-pound capacity forklift truck on a type V platform for low-velocity airdrop (continued)

| National Stock Number | Item | Quantity |
|-----------------------|--------------------------------------|-------------|
| 8305-00-268-2411 | Webbing: Cotton, 1/4-inch, type I | As required |
| 8305-00-082-5752 | Nylon: | As required |
| 8305-00-268-2453 | Tubular: 1/2-in, natural or | As required |
| 8305-00-268-2455 | 1/2-in, olive drab | As required |
| 8305-00-261-8584 | 1-in, olive drab | As required |
| | Type X | As required |

CHAPTER 5

RIGGING THE M271, 4,000-POUND CAPACITY FORKLIFT ON A TYPE V PLATFORM FOR LOW-VELOCITY AIRDROP

5-1. Description of Load

The M271, 4,000-pound capacity forklift truck (*Figure 5-1*) has an unrigged weight of 12,000 pounds which is not reducible. The length is 205 inches (reducible to 165 inches), width is 80-inches which is not reducible, height is 80-inches reducible to 78 inches. The forklift is rigged with three G-11 cargo parachutes on a 16-foot type V platform with a total rigged weight of 15,400 pounds, height of 98 1/2 inches, width of 108-inches, and length of 266 inches with a 15-inch, front overhang, a 16-inch rear overhang and a center of balance of 83 inches.

5-2. Preparing Platform

Prepare a 16-foot, type V platform using four tandem links and 24 clevis assemblies as shown in *Figure 5-2*.

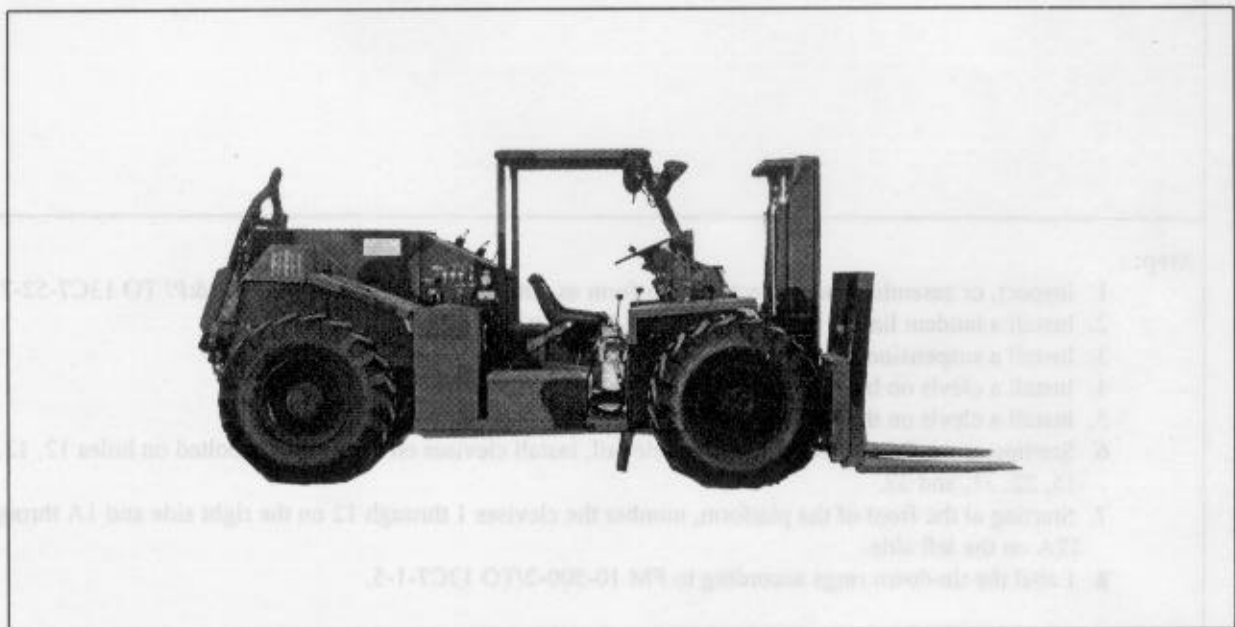
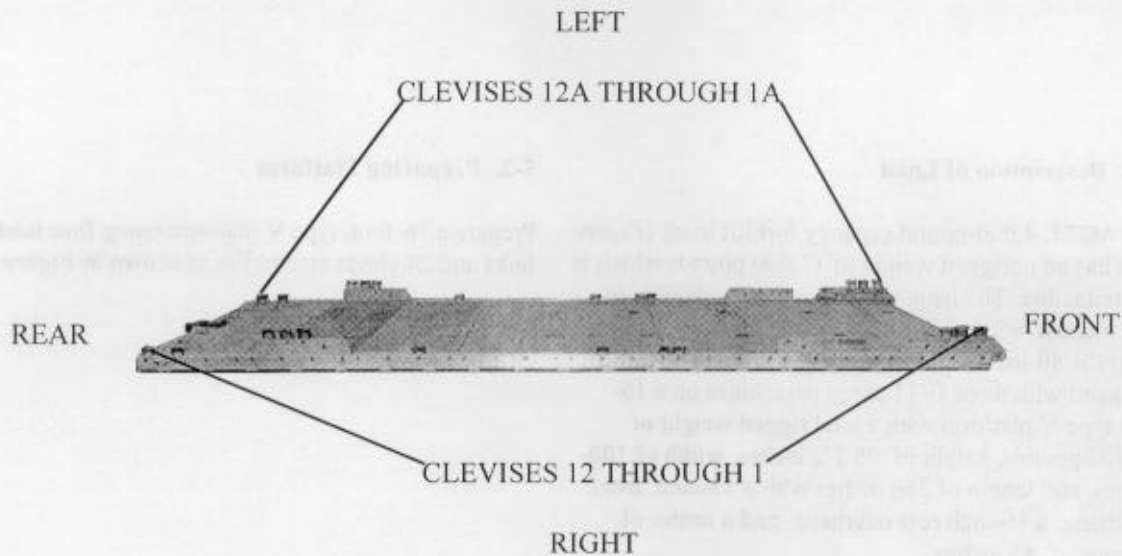


Figure 5-1. M271, 4000-pound capacity forklift truck

Notes: 1. The nose bumper may or may not be installed.

2. Measurements given in this section are from the front edge of the platform, NOT from the edge of the nose bumper.



Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/ TO 13C7-52-22.
2. Install a tandem link to the front of each side rail using holes 1, 2, and 3.
3. Install a suspension link to each side rail using holes 6, 7, 8, 25, 26, and 27.
4. Install a clevis on bushings 1, 2, and 3 of each front tandem link.
5. Install a clevis on the rear suspension link on bushings 2, 3, and 4.
6. Starting at the front of each platform side rail, install clevises on the bushings bolted on holes 12, 13, 15, 22, 31, and 32.
7. Starting at the front of the platform, number the clevises 1 through 12 on the right side and 1A through 12A on the left side.
8. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

Figure 5-2. Platform prepared

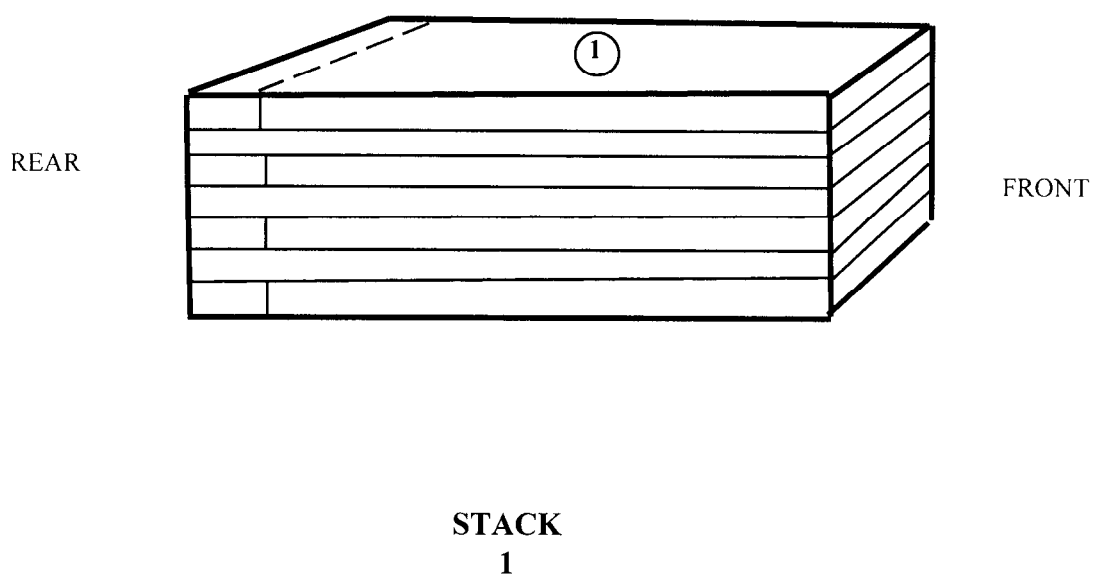
5-3. Preparing and Positioning Honeycomb Stacks

Use the materials in *Table 5-1* to prepare seven honeycomb stacks as shown in *Figures 5-3* through *5-12*. Position the stacks on the platform as shown in *Figures 5-13* and *5-14*.

Table 5-1. Materials required to build honeycomb stacks

| Stack Number | Pieces | Width (Inches) | Length (Inches) | Material | Instructions |
|--------------|--------|----------------|-----------------|--------------|--|
| 1 | 7 | 42 | 44 | Honeycomb | See <i>Figures 5-3</i> through <i>5-5</i> . |
| | 2 | 42 | 44 | 3/4" plywood | |
| | 1 | 42 | 37 1/2 | 3/4" plywood | |
| | 2 | 2 by 4 | 22 1/2 | Lumber | |
| | 3 | 2 by 4 | 37 1/2 | Lumber | |
| | 1 | 42 | 37 1/2 | 3/4" plywood | |
| | 2 | 4 by 4 | 10 | Lumber | |
| | 2 | 2 by 6 | 38 | Lumber | |
| | 1 | 38 | 4 | 3/4" plywood | |
| | 2 | 36 | 4 | 1/2" plywood | |
| | | | | | |
| 2 | 7 | 36 | 24 | Honeycomb | See <i>Figures 5-6</i> through <i>5-8</i> . |
| | 1 | 34 | 24 | 3/4" plywood | |
| | 4 | 2 by 6 | 24 | Lumber | |
| | 1 | 34 | 24 | 3/4" plywood | |
| | 1 | 16 | 24 | 3/4" plywood | |
| 3 | 7 | 42 | 32 | Honeycomb | See <i>Figures 5-9</i> through <i>5-11</i> . |
| | 1 | 42 | 32 | 3/4" plywood | |
| | 4 | 2 by 4 | 32 | Lumber | |
| | 1 | 42 | 32 | 3/4" plywood | |
| | 1 | 42 | 18 | 3/4" plywood | |
| | 2 | 2 by 6 | 18 | Lumber | |
| | 1 | 4 | 6 | 3/4" plywood | |
| | 1 | 42 | 6 | 3/4" plywood | |
| 4 | 3 | 27 | 68 | Honeycomb | See <i>Figure 5-12</i> . |
| 5 | 3 | 27 | 68 | Honeycomb | See <i>Figure 5-12</i> . |
| 6 | 3 | 27 | 68 | Honeycomb | See <i>Figure 5-12</i> . |
| 7 | 3 | 27 | 68 | Honeycomb | See <i>Figure 5-12</i> . |

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Glue seven 42- by 44-inch pieces of honeycomb as the base.

Figure 5-3. Honeycomb stack 1 base prepared

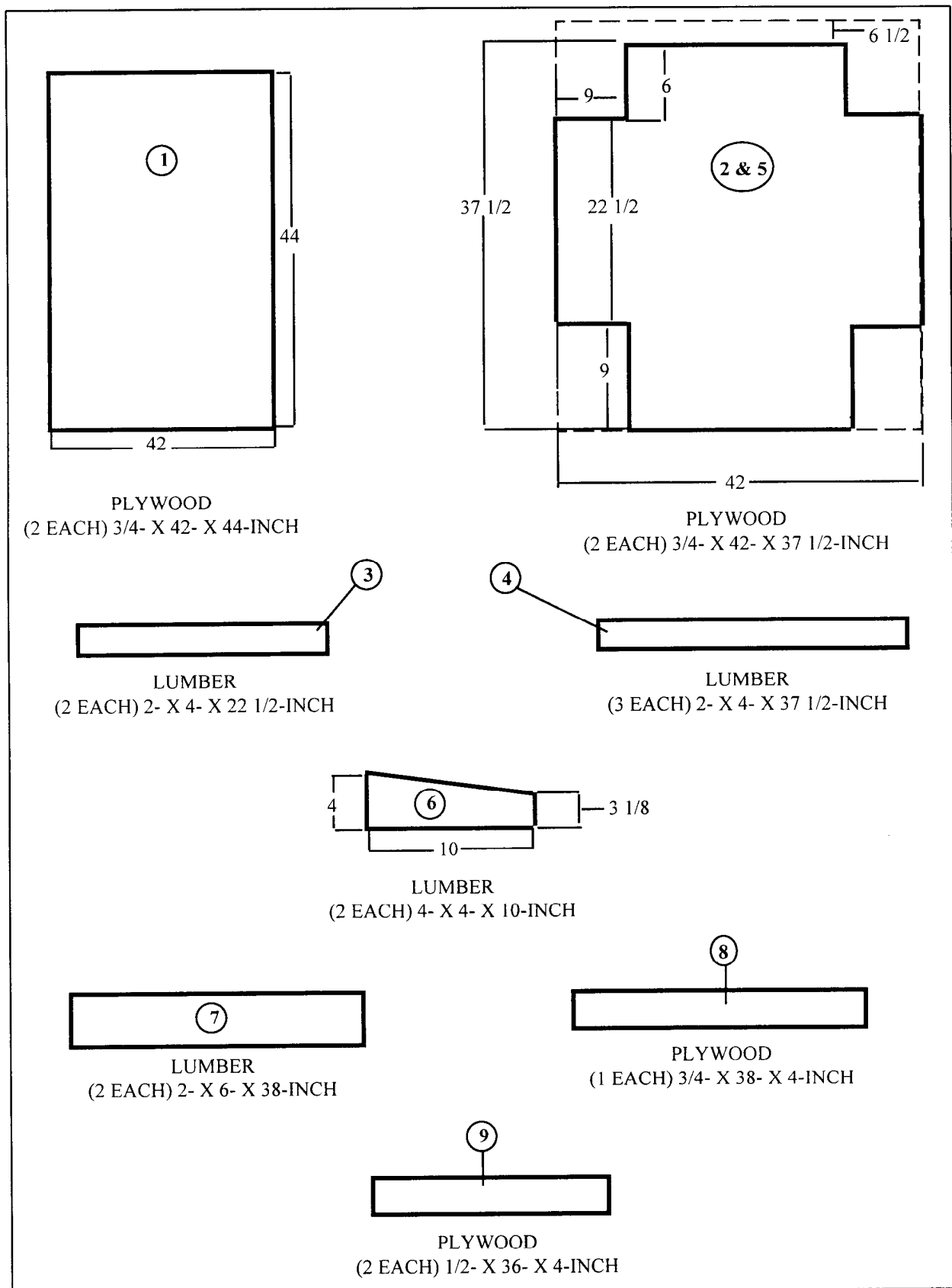
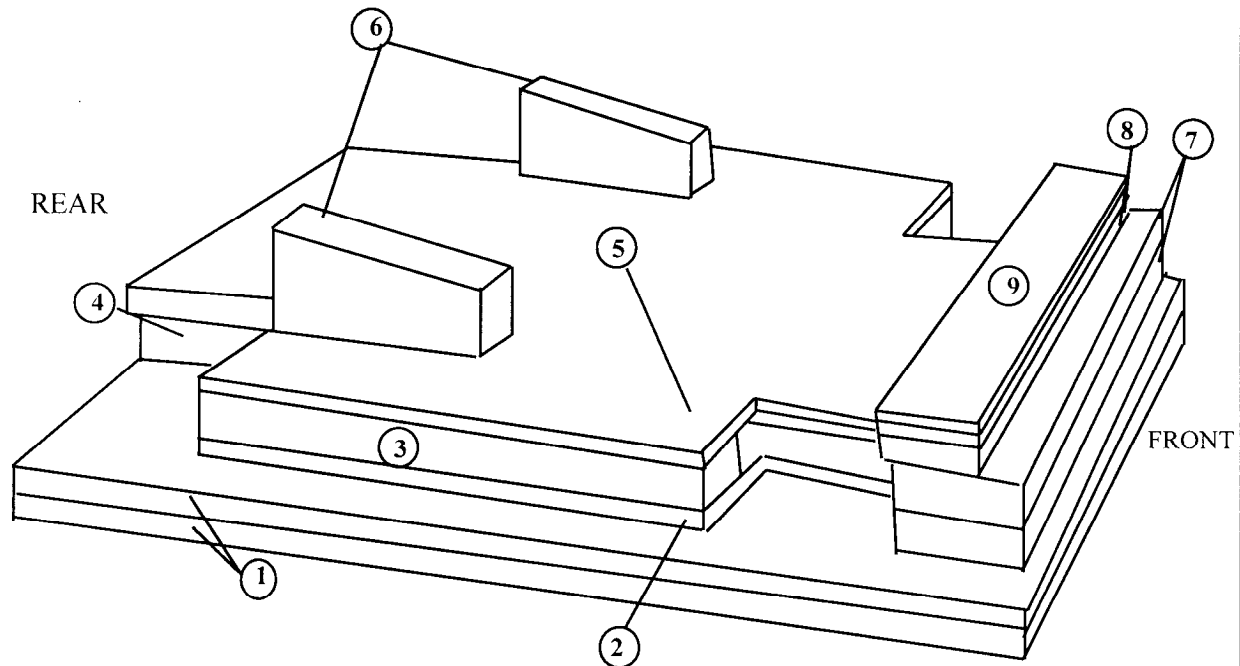


Figure 5-4. Pieces for stack 1 frame support

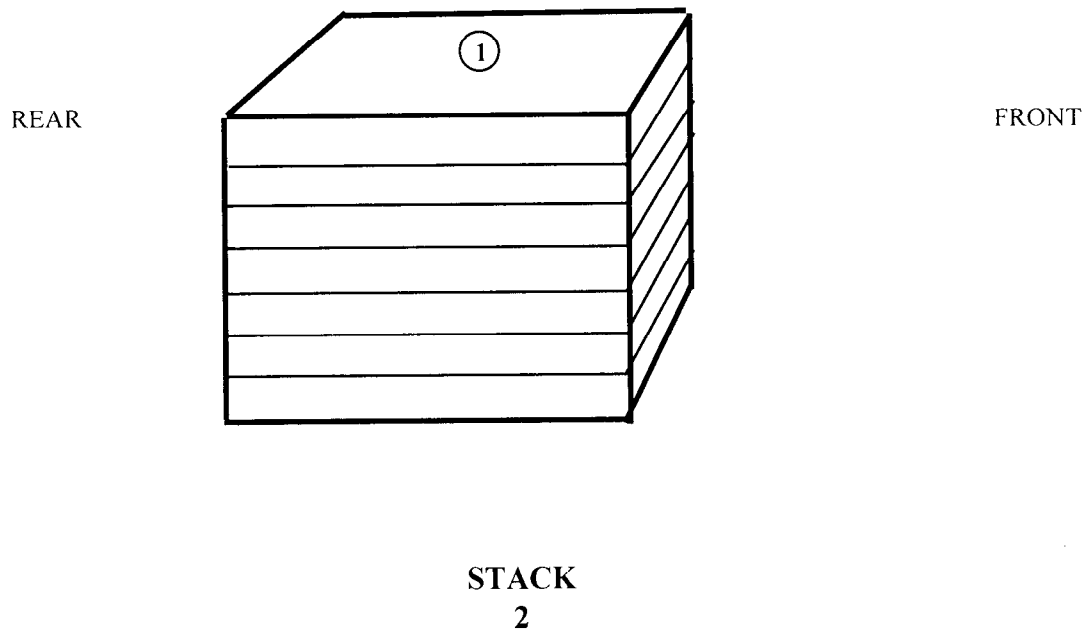
Note: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Glue and nail two 3/4- by 42- by 44-inch pieces of plywood together. Do not glue to base.
- ② Cut one 3/4- by 42- by 37 1/2-inch piece of plywood. Glue and nail to a 3/4- by 42- by 44-inch piece of plywood with 24-inch side flush with rear edge.
- ③ Glue and nail two 2- by 4- by 22 1/2-inch pieces of lumber, flush with right and left sides of plywood.
- ④ Glue and nail three 2- by 4- by 37 1/2-inch pieces of lumber.
- ⑤ Cut one 3/4- by 42- by 37 1/2-inch piece of plywood. Glue and nail to a 2- by 4-inch piece of lumber.
- ⑥ Cut two 4- by 4- by 10-inch pieces of lumber measuring 4 inches high on one end and 3 1/8 inches high on the other. Glue and nail flush with rear edge of plywood 6 inches from right and left sides as shown above.
- ⑦ Glue and nail two 2- by 6- by 38-inch pieces of lumber together, flush against the plywood and a 2- by 6-inch piece of lumber centered from right to left.
- ⑧ Glue and nail one 3/4- by 38- by 4-inch piece of plywood flush with the rear edge of a 2- by 6- by 38-inch piece of lumber and centered.
- ⑨ Glue and nail two 1 1/2- by 36 by 4-inch pieces of plywood on top of the 3/4- by 38- by 4-inch piece of plywood.

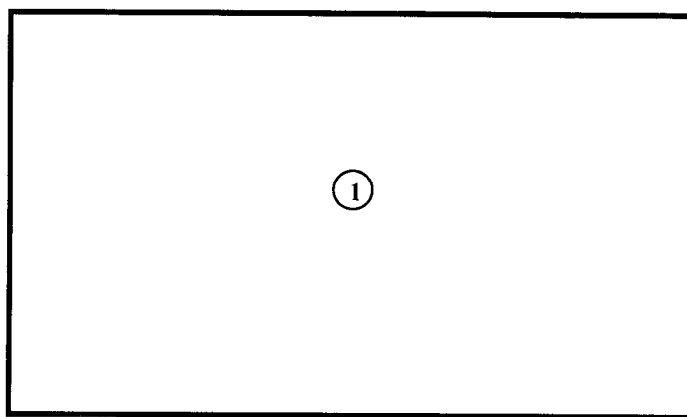
Figure 5-5. Stack 1 frame support built

Note: This drawing is not drawn to scale.

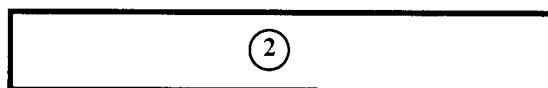


- ① Glue seven 36- by 24- inch pieces of honeycomb to form base.

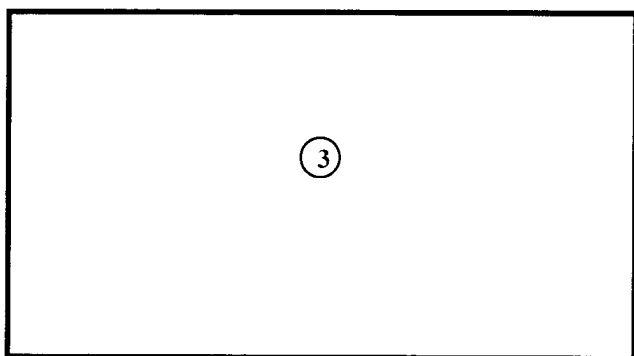
Figure 5-6. Stack 2 base prepared



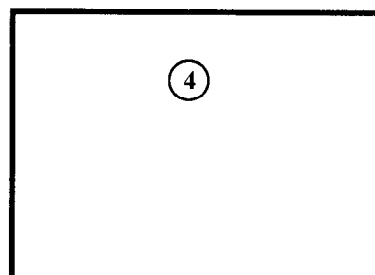
PLYWOOD
(1 EACH) 3/4- X 34- X 24-INCH



LUMBER
(4 EACH) 2- X 6- X 24-INCH



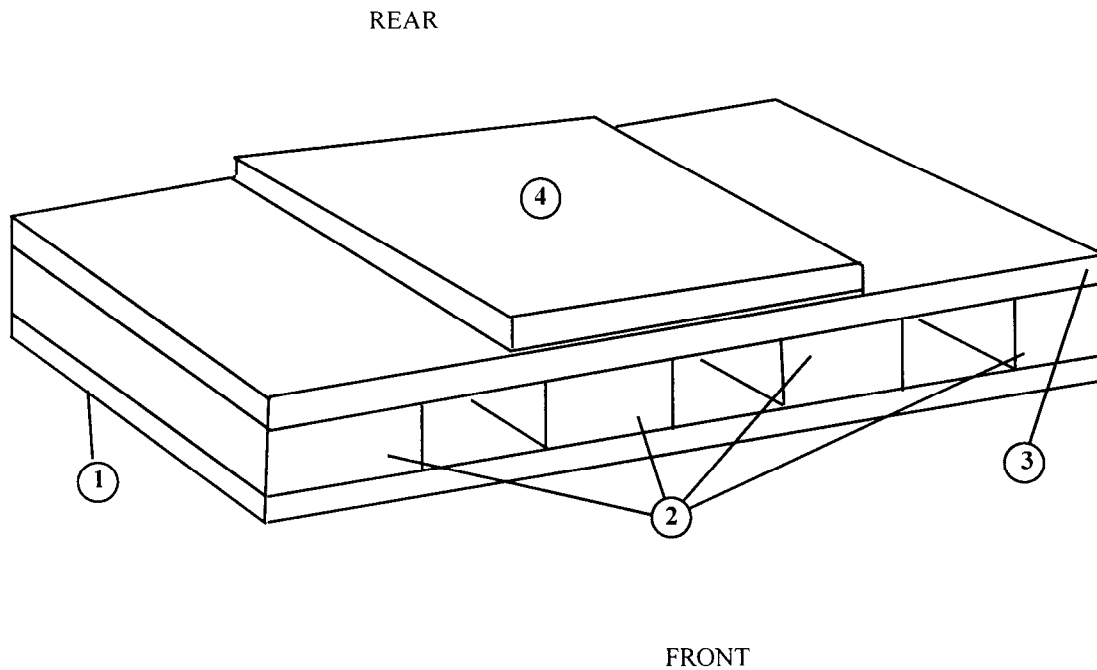
PLYWOOD
(1 EACH) 3/4- X 26- X 24-INCH



PLYWOOD
(1 EACH) 3/4- X 16- X 24-INCH

Figure 5-7. Pieces for stack 2 frame support

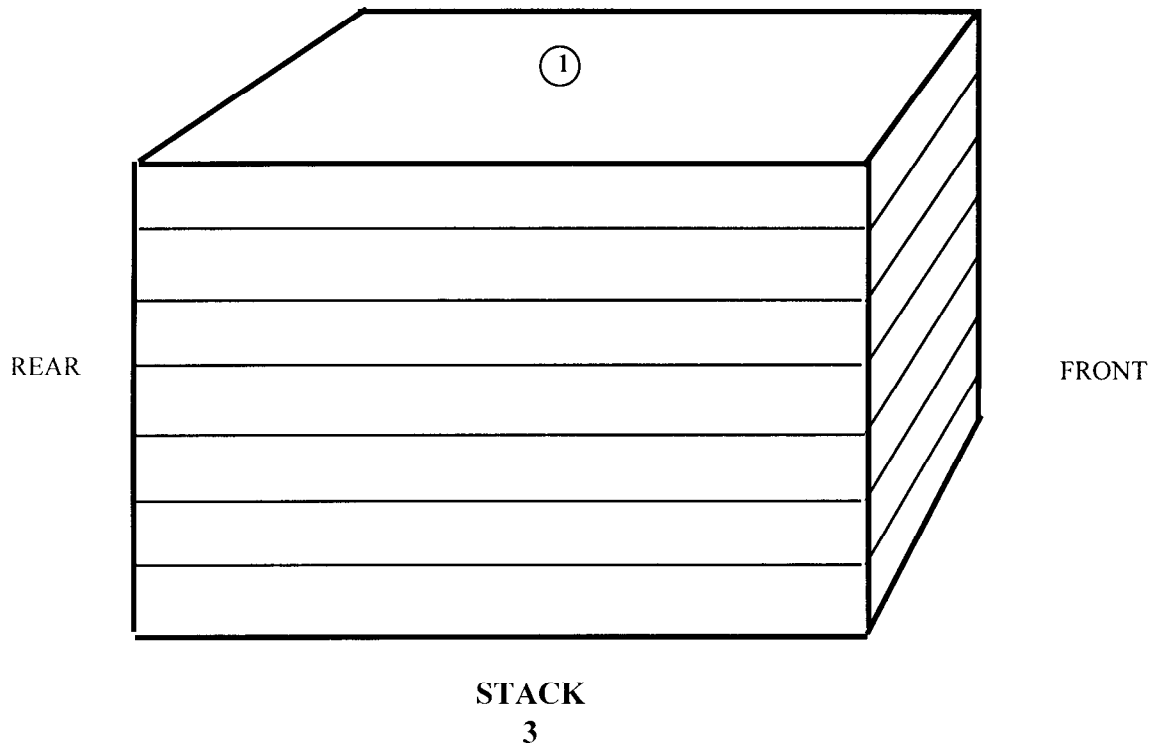
- Notes: 1. This drawing is not drawn to scale.
 2. All measurements are given in inches.



- ① Place a 3/4- by 34- by 24-inch piece of plywood on the base. Do not glue to base.
- ② Glue and nail four 2- by 6- by 24-inch pieces of lumber to plywood, one piece flush with right edge and one piece flush with left edge. Center the other two pieces and space them 4 inches apart.
- ③ Glue and nail one 3/4- by 26- by 24-inch piece of plywood on top of lumber.
- ④ Glue and nail one 3/4- by 16- by 24-inch piece of plywood centered on plywood .

Figure 5-8. Stack 2 frame support built

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Glue seven 42- by 32- inch pieces of honeycomb to form base.

Figure 5-9. Stack 3 base prepared

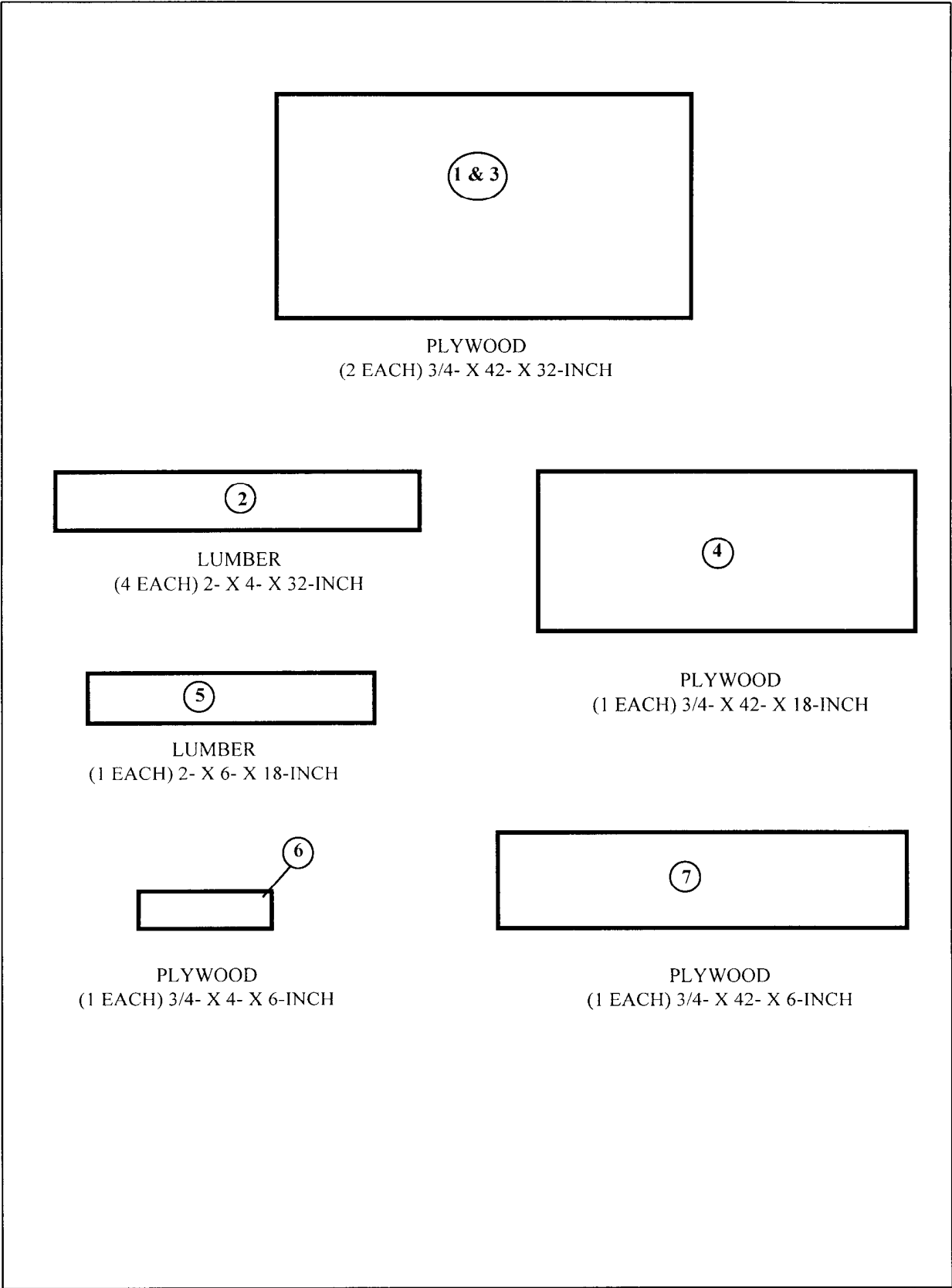
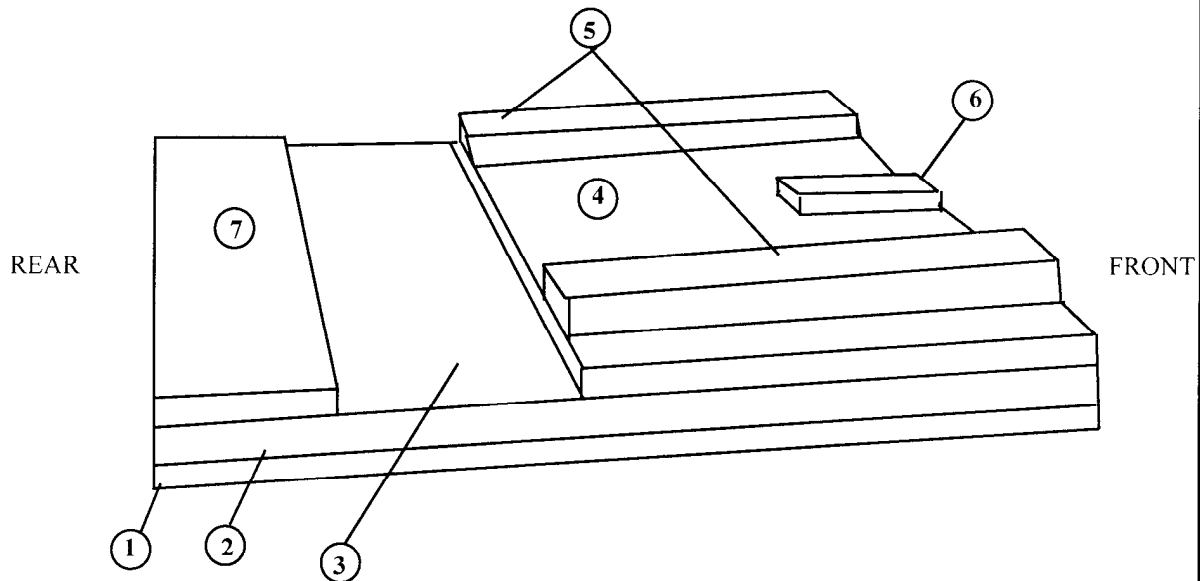


Figure 5-10. Pieces for stack 3 frame support

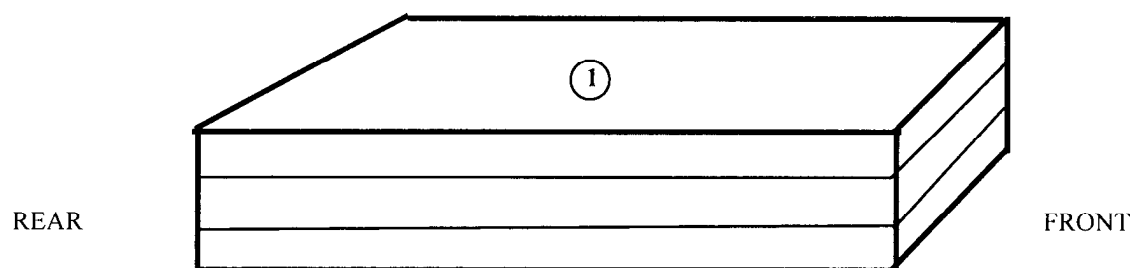
- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Place one 3/4- by 42- by 32-inch piece of plywood on the base. Do not glue to base.
- ② Glue and nail four 2- by 4- by 32-inch pieces of lumber to the 3/4- by 42- by 32-inch piece of plywood, one piece flush with right edge and one piece flush with left edge. Place one piece 8 1/2 inches from the right piece and one piece 8 1/2 inches from the left piece.
- ③ Glue and nail one 3/4- by 42- by 32-inch piece of plywood on top of the 2- by 4- by 32-inch piece of lumber.
- ④ Glue and nail one 3/4- by 42- by 18-inch piece of plywood on a 3/4- by 42- by 32-inch of plywood flush with front edge.
- ⑤ Glue and nail two 2- by 6- by 18-inch pieces of lumber, one piece 3 inches from right edge of 3/4- by 42- by 18-inch piece of plywood and one piece 3 inches from left side.
- ⑥ Glue and nail one 3/4- by 4- by 6-inch piece of plywood with the 4-inch side centered on the front edge of stack.
- ⑦ Glue and nail one 3/4- by 42- by 6-inch piece of plywood flush with rear edge of stack.

Figure 5-11. Stack 3 frame support built

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



STACKS
4, 5, 6, 7

- ① Glue three 27- by 68-inch pieces of honeycomb to form stack.

Figure 5-12. Stacks 4, 5, 6, and 7 prepared

- Notes: 1. This drawing is not drawn to scale.
 2. All measurements are given in inches.

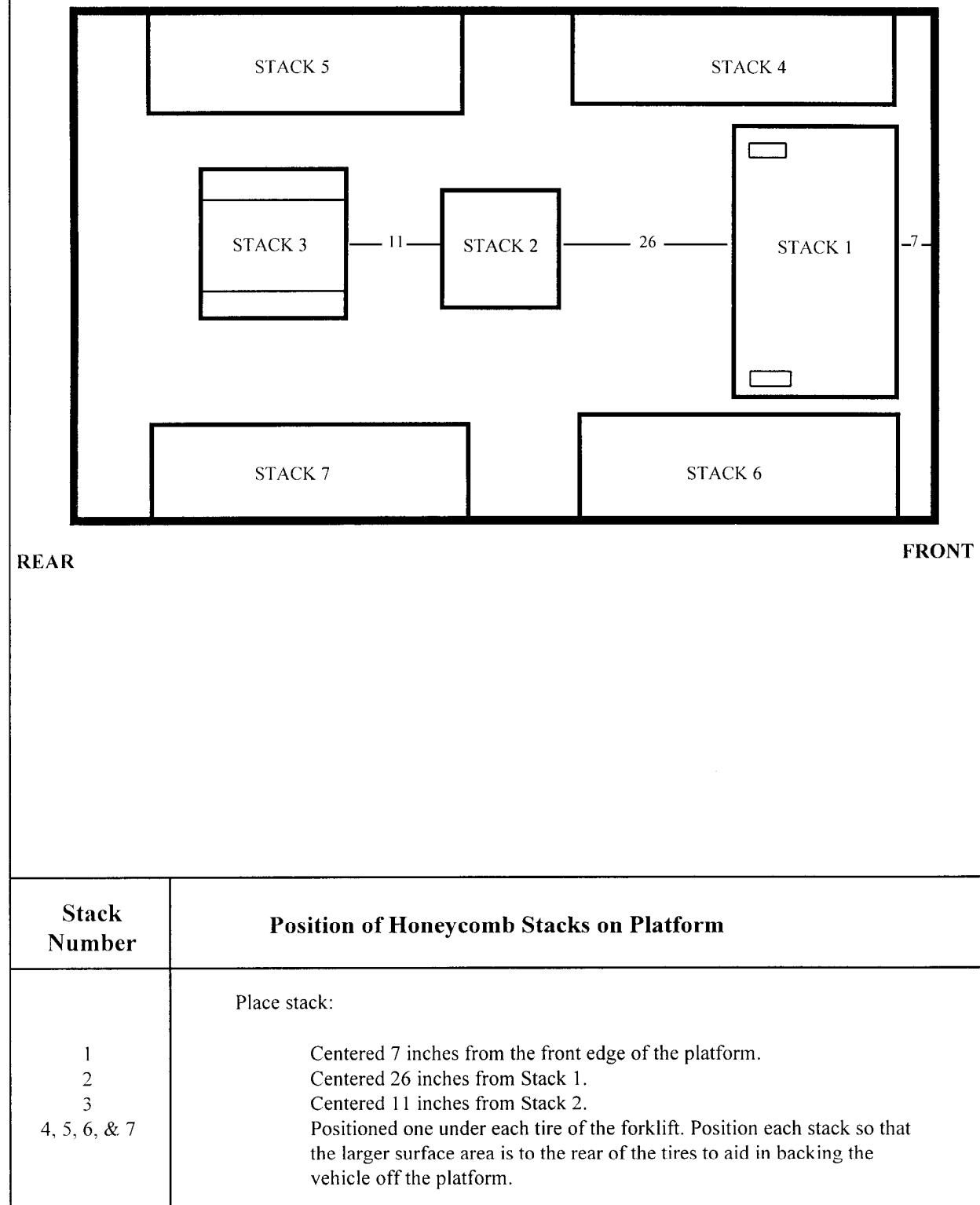
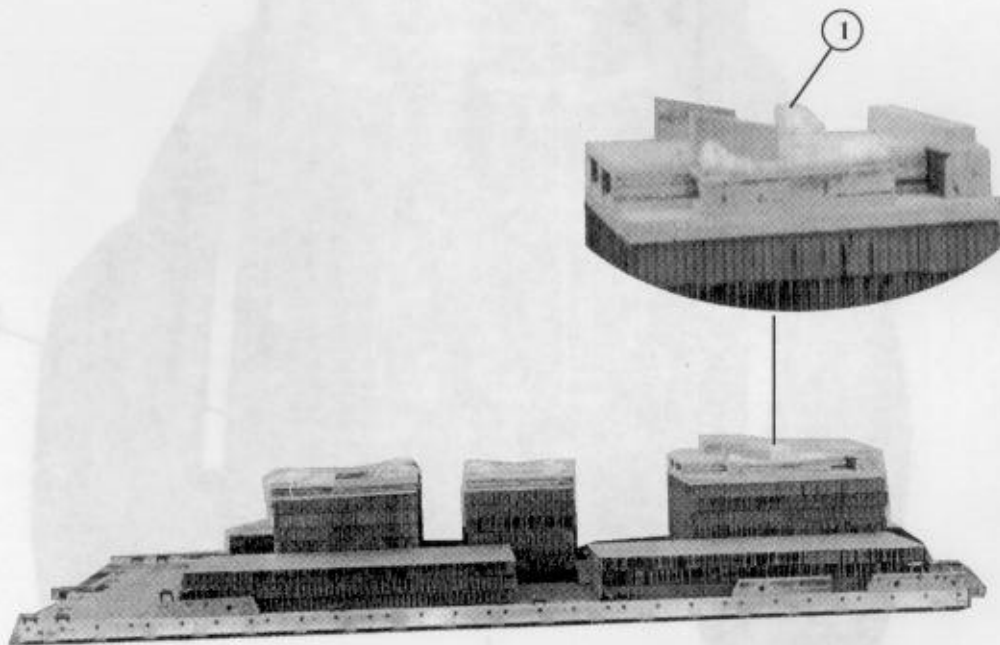


Figure 5-13. Detail of honeycomb stacks positioned on platform



- ① Load spreaders **"Are Not Glued To The Honeycomb"**. They will be tied to the bottom of the forklift with two lengths of 1/2-inch tubular nylon webbing each approximately 150 inches. Run the webbing through the right and left most outside openings leaving equal lengths on both running ends.

Figure 5-14. Honeycomb stacks positioned on platform

5-4. Preparing Forklift Before Positioning

Prepare the forklift before positioning it on the platform as described below and shown in *Figures 5-15* through *5-18*.

- a. Make sure the fuel tank is not more than 3/4 full.
- b. Pad and tape all lights, reflectors, and gauges.

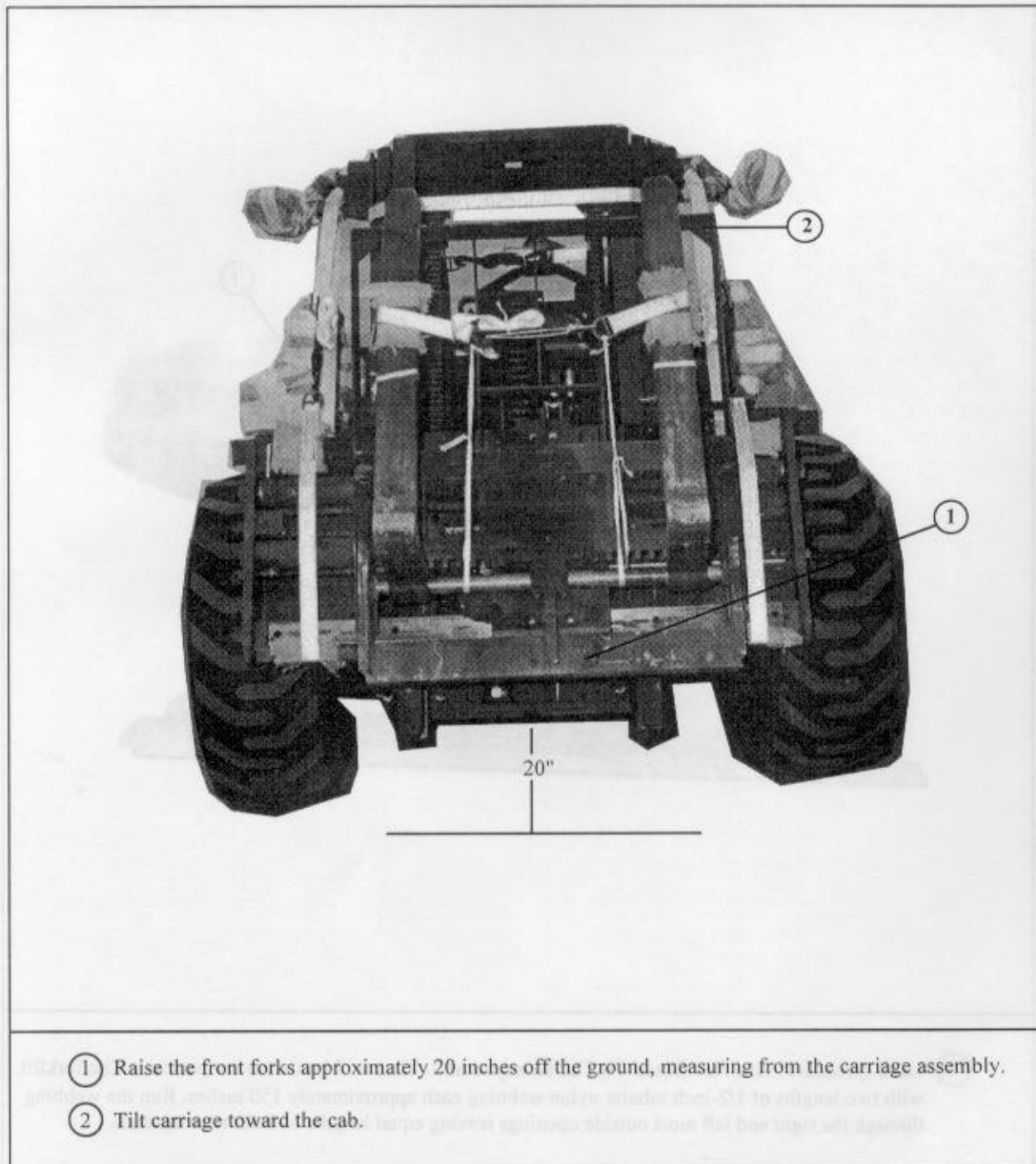
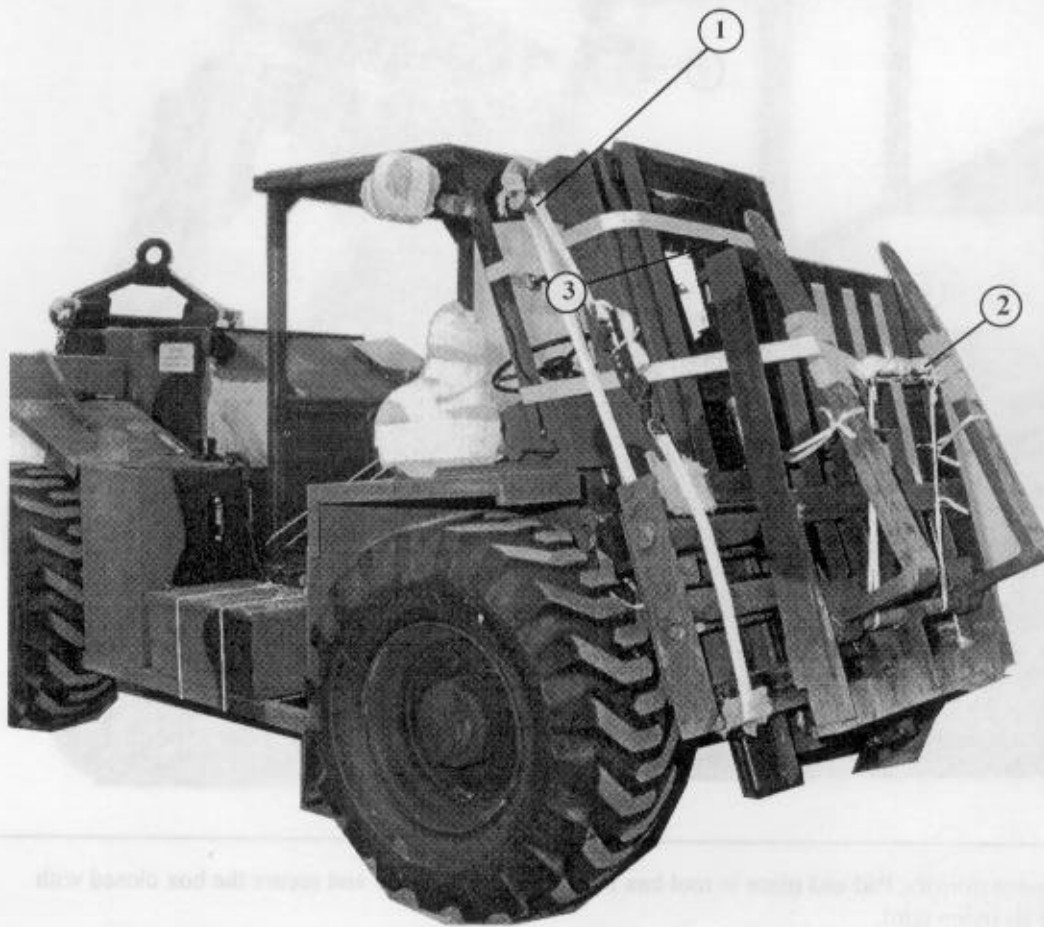
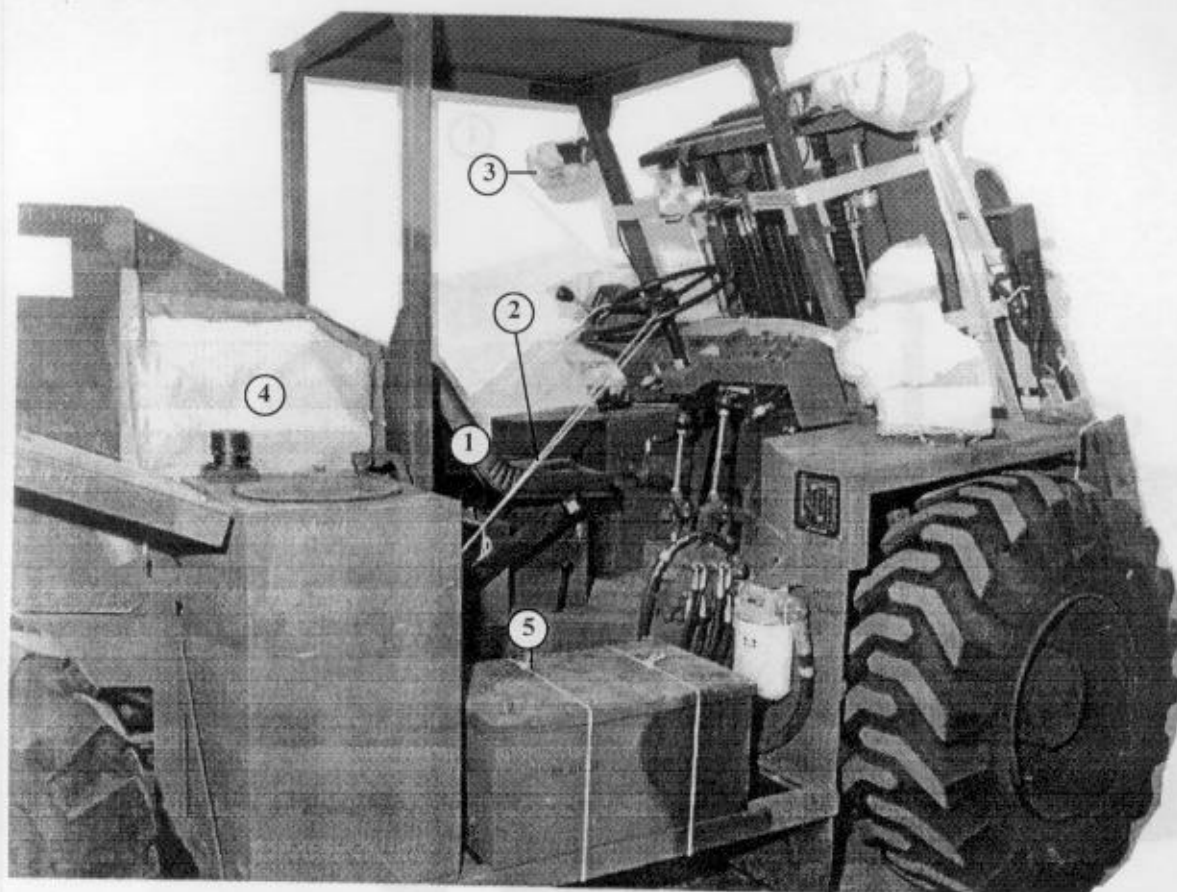


Figure 5-15. Front forks prepared



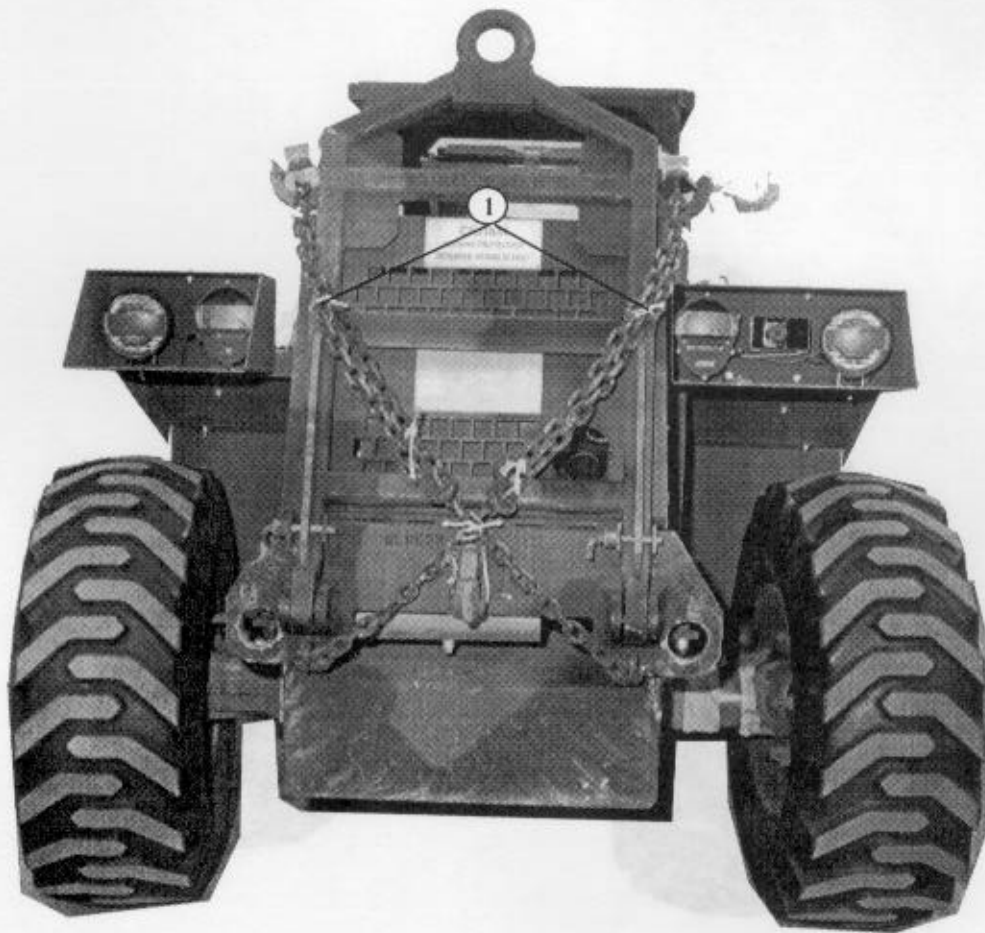
- ① Run a lashing from front lifting ring around entire fork carriage on the right and left sides.
- ② Rotate the forks up toward the cab and secure with a lashing to the cab support bar and safety tie the load binder twice to the carriage with 1/2-inch tubular nylon webbing.
- ③ Secure the carriage support assembly to the cab support bar with a lashing.

Figure 5-16. Fork carriage prepared



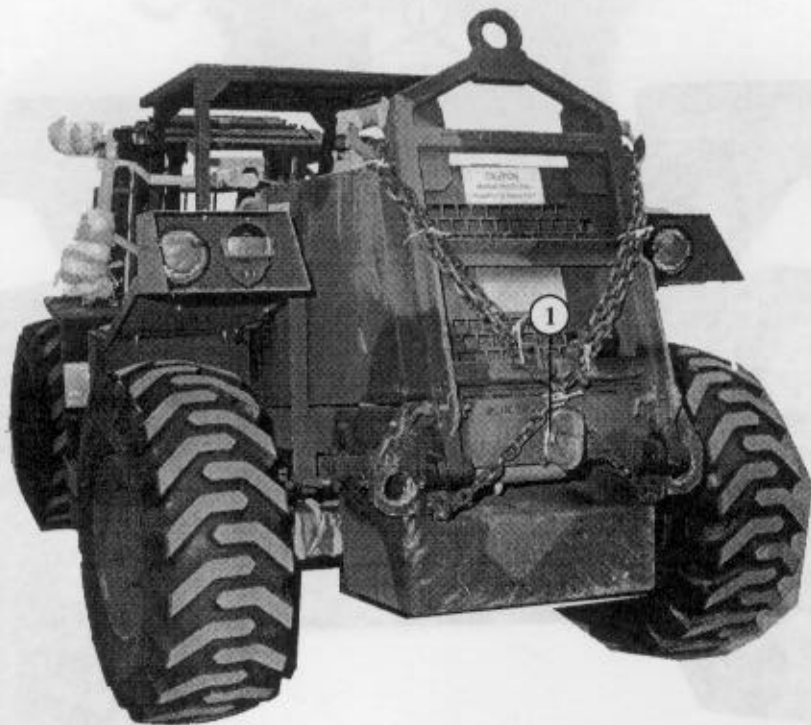
- ① Remove mirrors. Pad and place in tool box behind the driver's seat and secure the box closed with type III nylon cord.
- ② Secure the steering wheel with type III nylon cord.
- ③ Pad and tape all lights.
- ④ Pad and tape right side electrical panel.
- ⑤ Safety tie battery box closed with type III cord.
- ⑥ Safety tie fuel filter with type III nylon cord. (Not shown)

Figure 5-17. Mirrors, steering wheel, lights, electrical panel, battery box and fuel filter secured



- ① Safety tie chains on the rear of forklift with type III nylon cord to the body of the forklift. ①

Figure 5-18. Rear of forklift prepared



- ① Safety the pintle with type III nylon cord.

Figure 5-19. Forklift pintle secured

5-5. Building and Positioning the Fender Protection Kit

Build and position the fender protection kit as described below.

a. Build two honeycomb fender protection kits as shown in *Figures 5-20* and *5-21*.

b. Position the fender protection kits on the appropriate fender as shown in *Figure 5-22*.

c. Secure fender protection kits on forklift as shown in *Figures 5-23* and *5-24*.

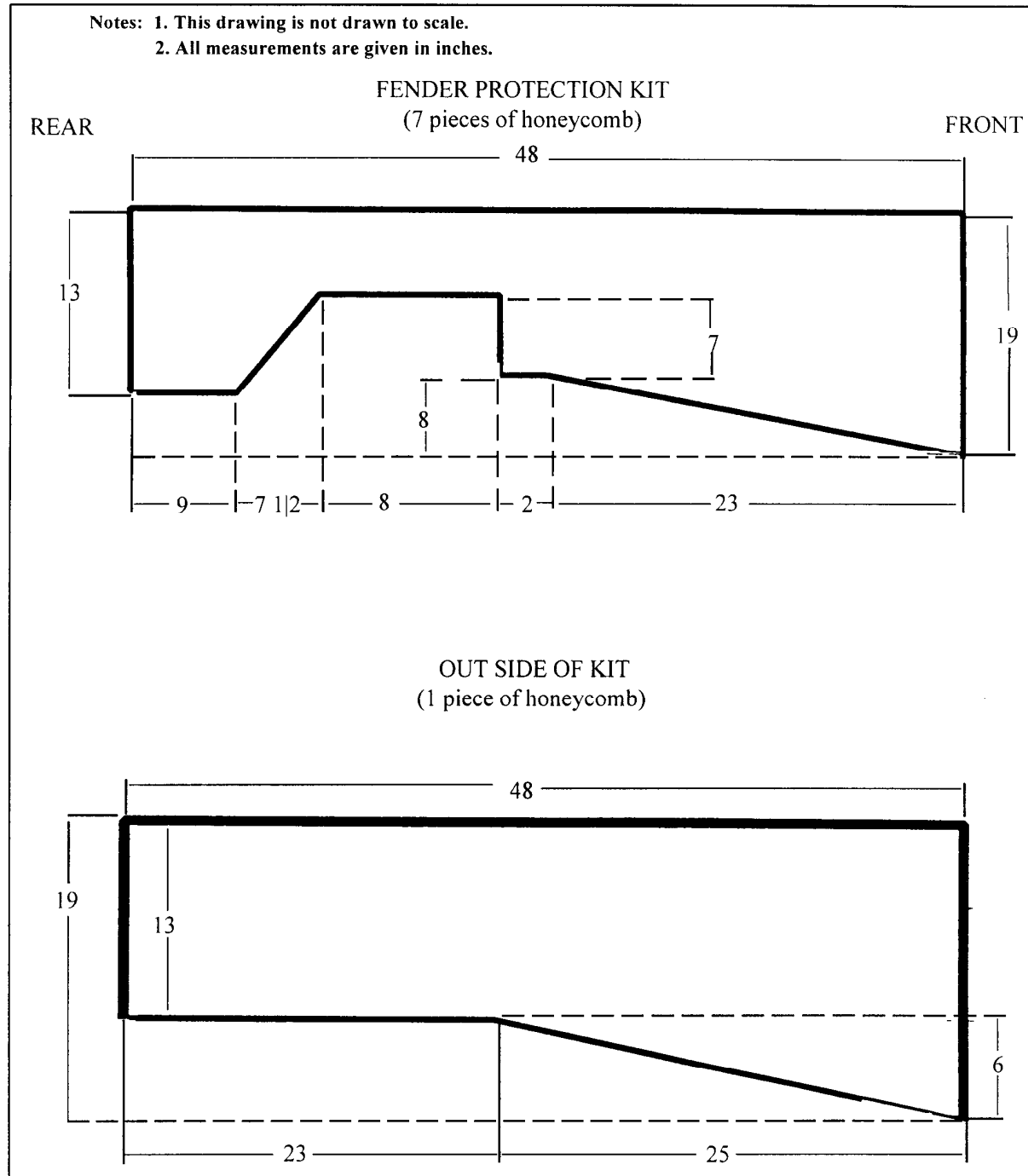
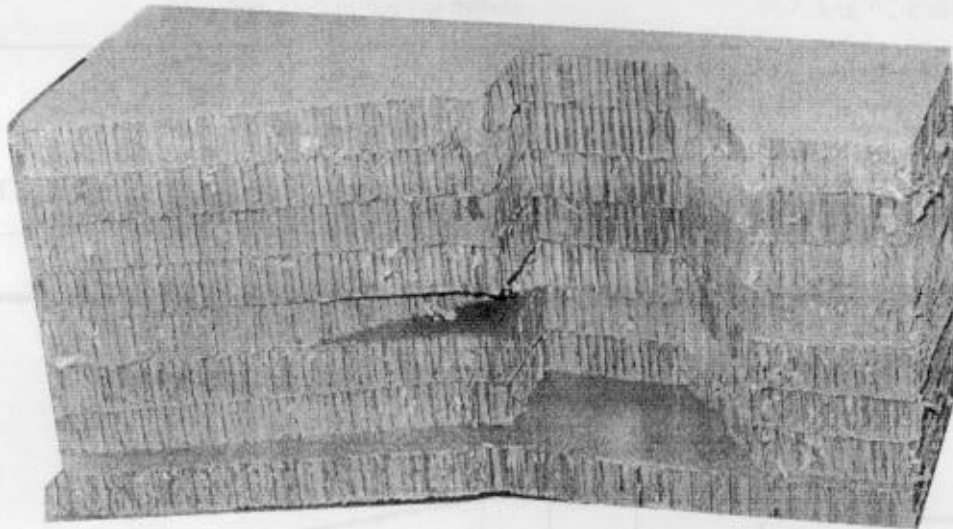
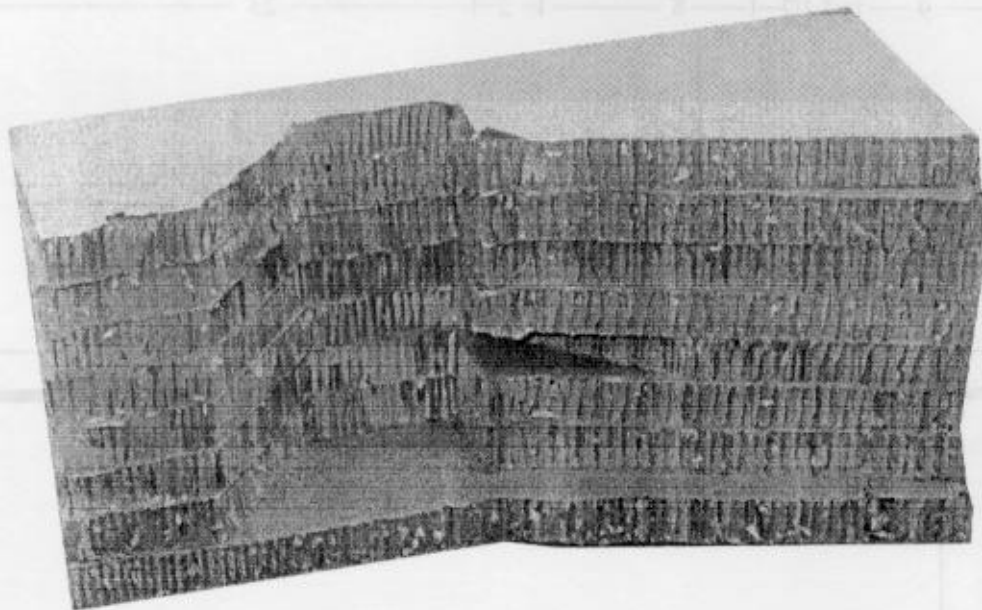


Figure 5-20. Detail for honeycomb fender protectors

Fender Protectors

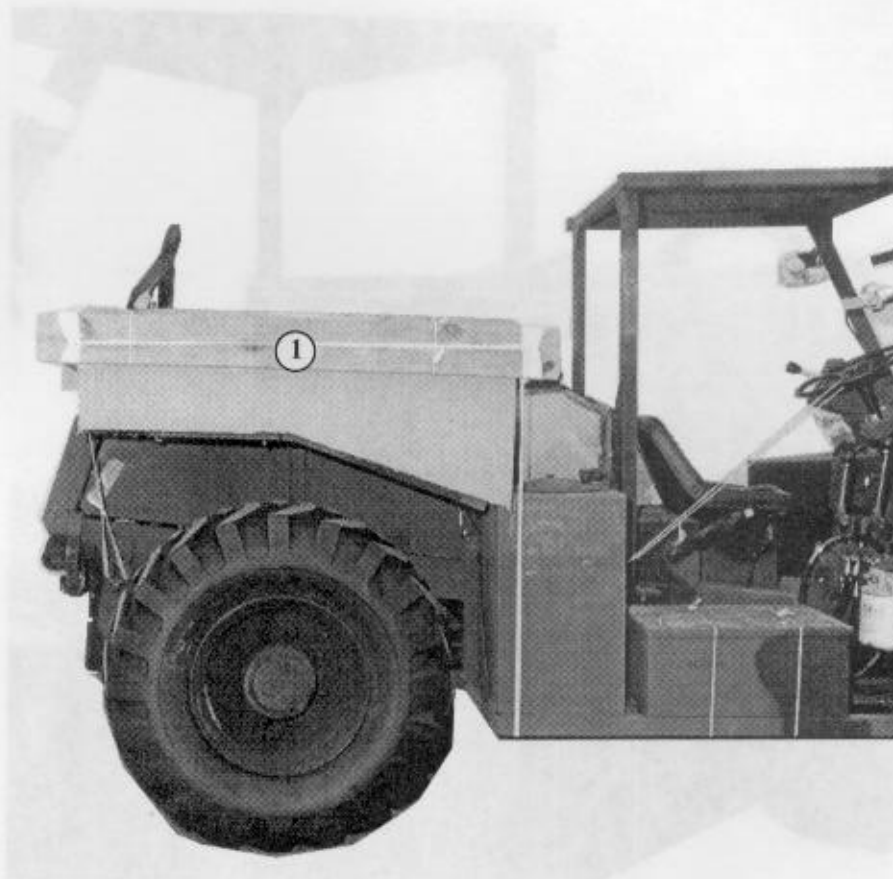


RIGHT



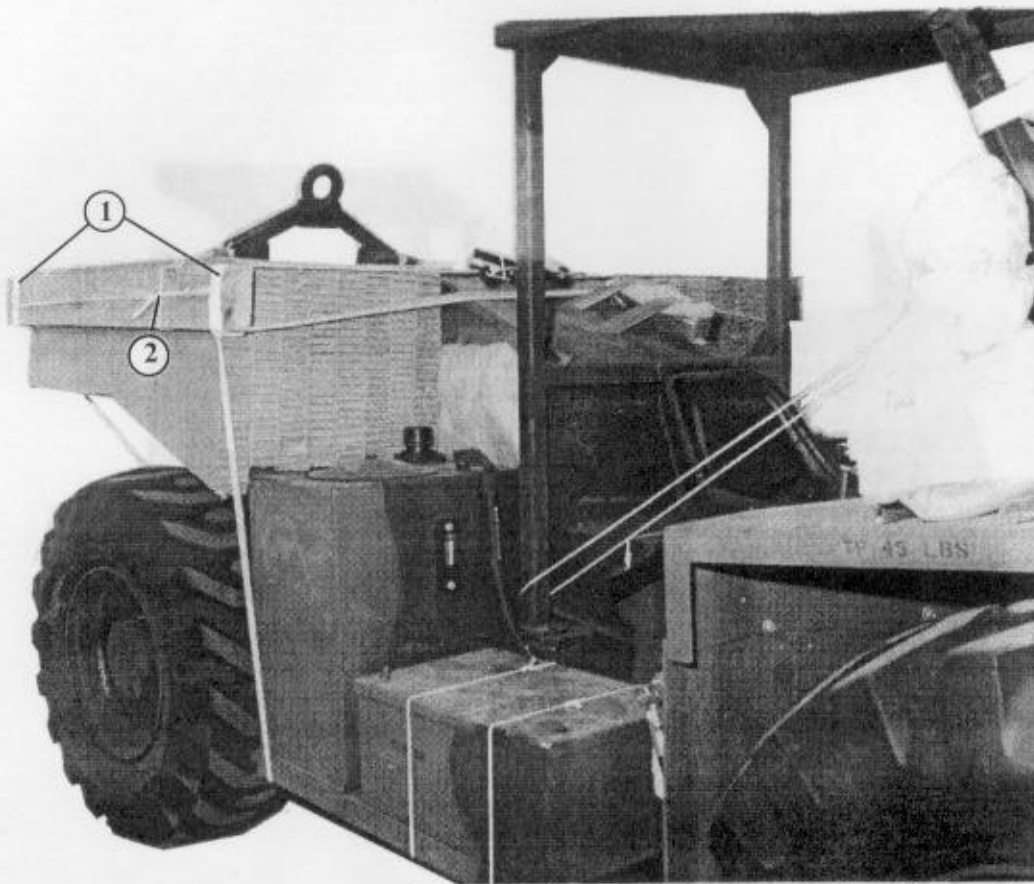
LEFT

Figure 5-21. Honeycomb fender protectors completed



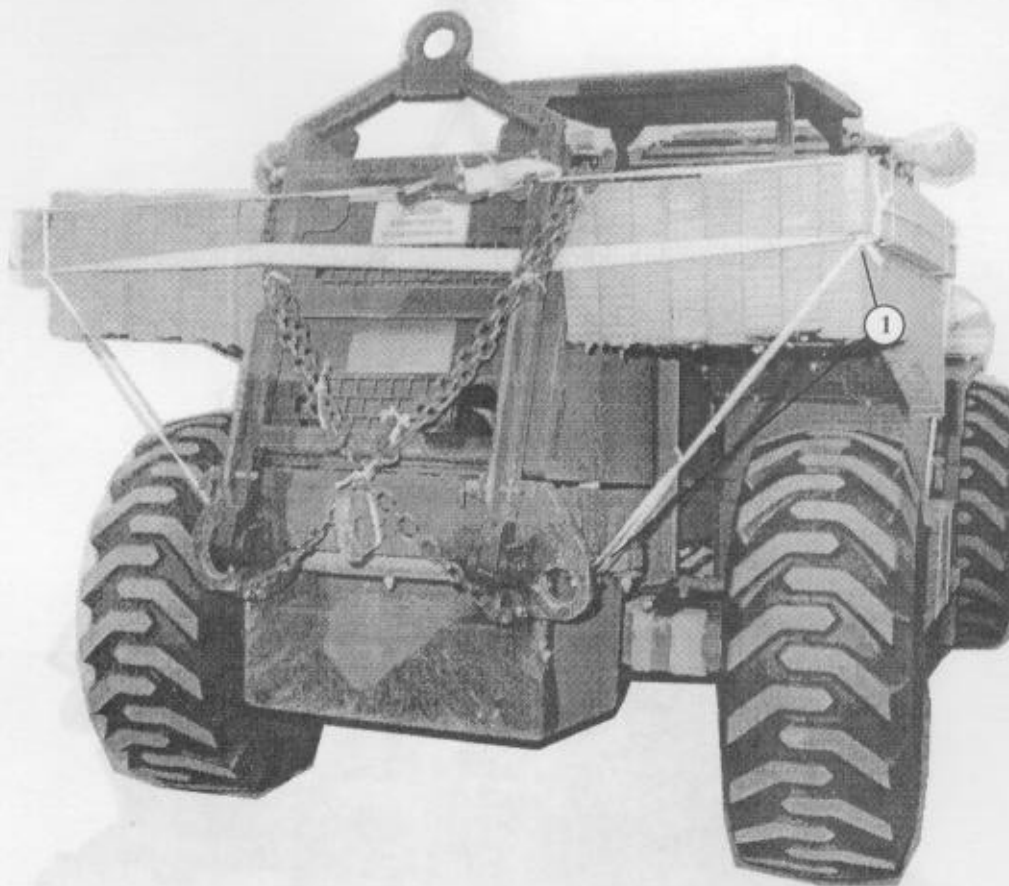
- ① Cut two 2- by 6- by 56-inch pieces of lumber and position one on each fender protector flush and centered with the top edge. Use type III nylon cord to hold them temporarily in place.

Figure 5-22. Honeycomb fender protectors positioned



- ① Secure the lumber in place with a lashing on the front and the rear of the lumber as shown above.
- ② Safety the lashing together with a length of 1/2-inch tubular nylon webbing.

Figure 5-23. Honeycomb fender protectors secured

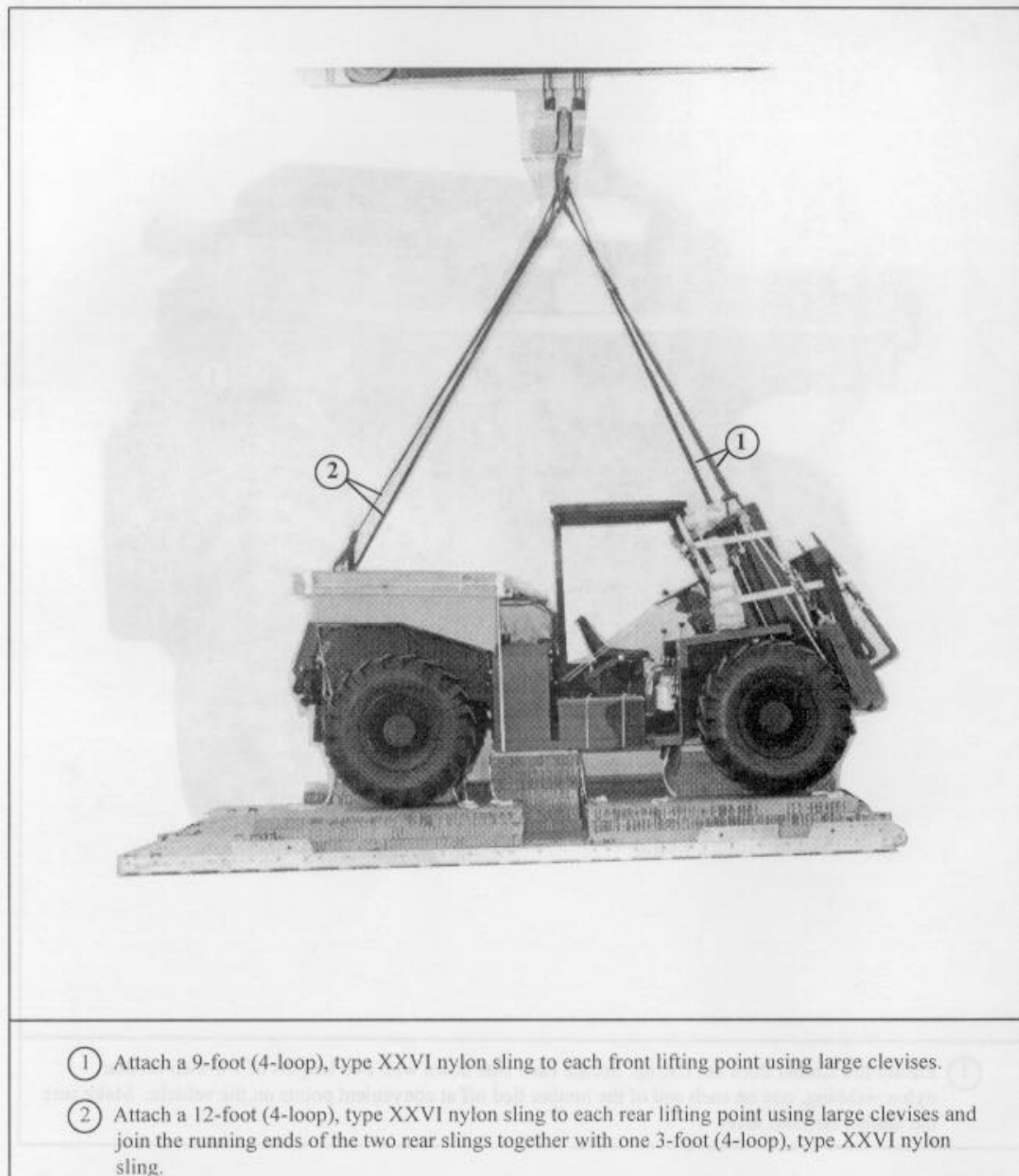


- ① Ensure the lumber does not rise up. Secure each side down with two lengths of 1/2-inch tubular nylon webbing, one on each end of the lumber tied off at convenient points on the vehicle. Make sure the lumber remains level.

Figure 5-24. Honeycomb fender protectors prepared

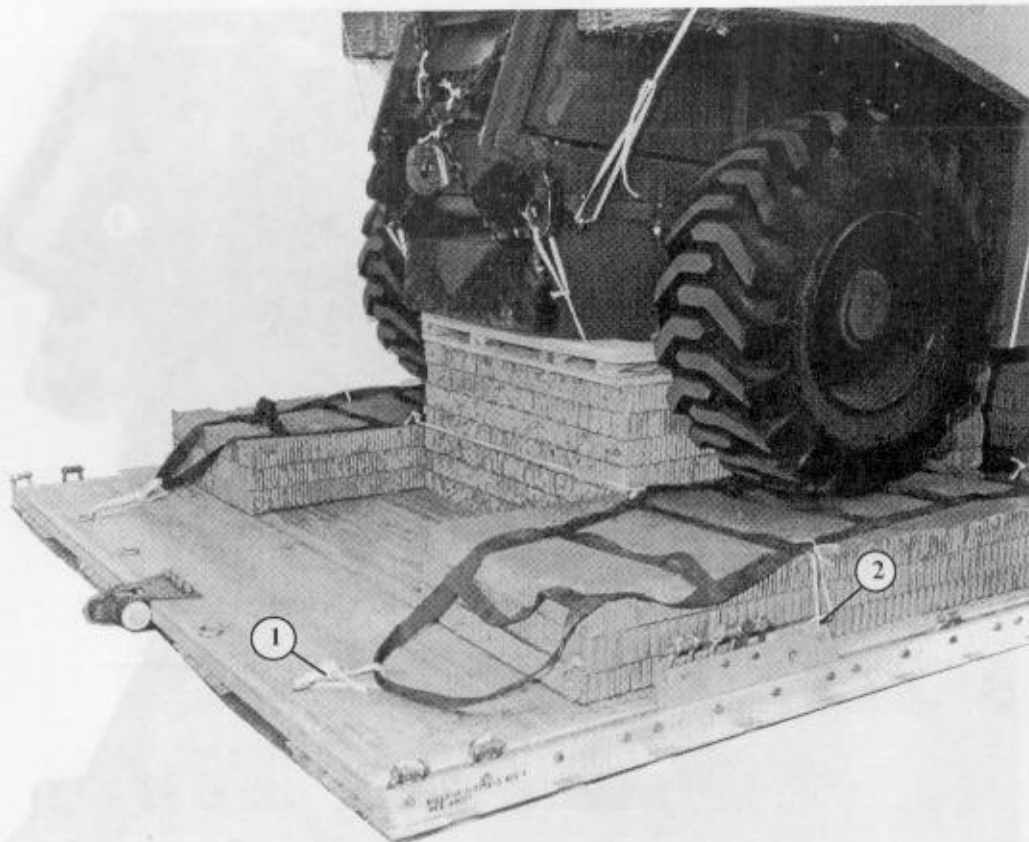
5-6. Installing Lifting Slings and Positioning Drive-Off Aids

Install the lifting slings as shown and described in *Figure 5-25*. Position the drive-off aids as shown and described in *Figures 5-26* and *5-27*.



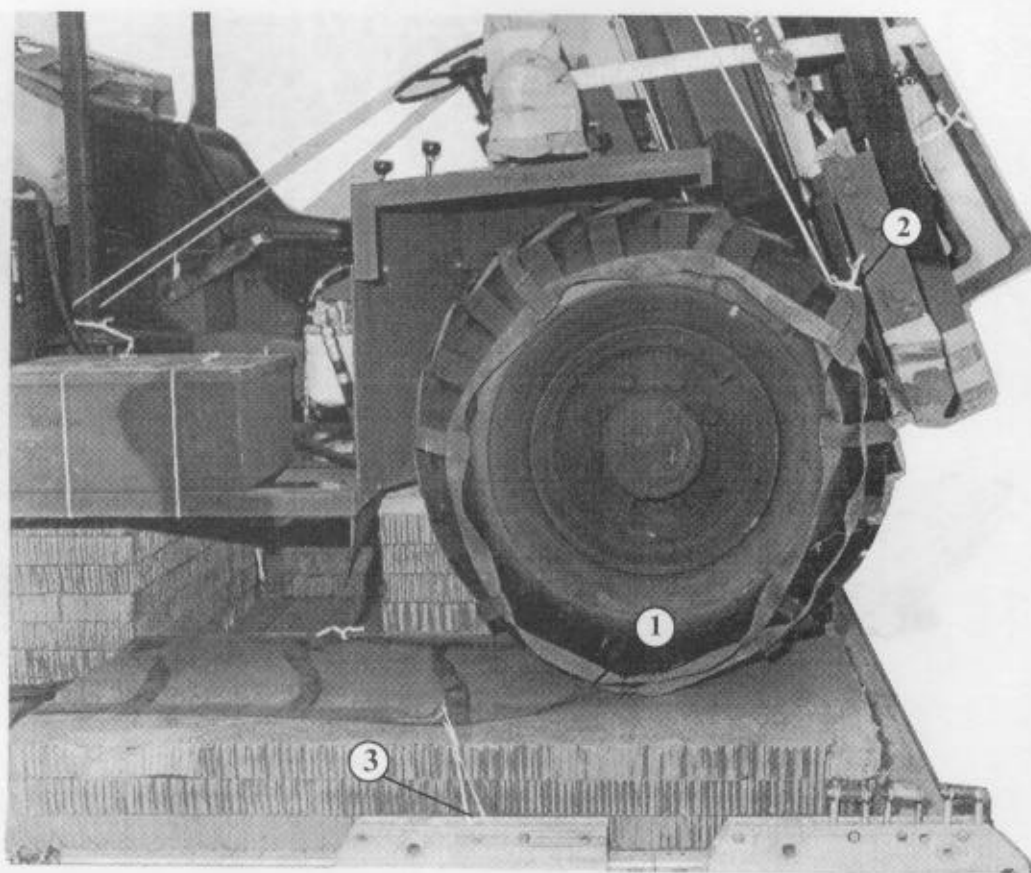
- ① Attach a 9-foot (4-loop), type XXVI nylon sling to each front lifting point using large clevises.
- ② Attach a 12-foot (4-loop), type XXVI nylon sling to each rear lifting point using large clevises and join the running ends of the two rear slings together with one 3-foot (4-loop), type XXVI nylon sling.

Figure 5-25. Lifting slings installed



- ① Lay a drive-off aid on each side of the platform and secure the rear end to tie-down ring A8 on the right side and tie-down ring D8 on the left side using type V nylon webbing. Tie the webbing according to FM 10-500-2/TO 13C7-1-5.
- ② Secure the drive off aid along the side of the platform using 1/4-inch cotton webbing to convenient points on the platform.

Figure 5-26. Drive-off aids positioned

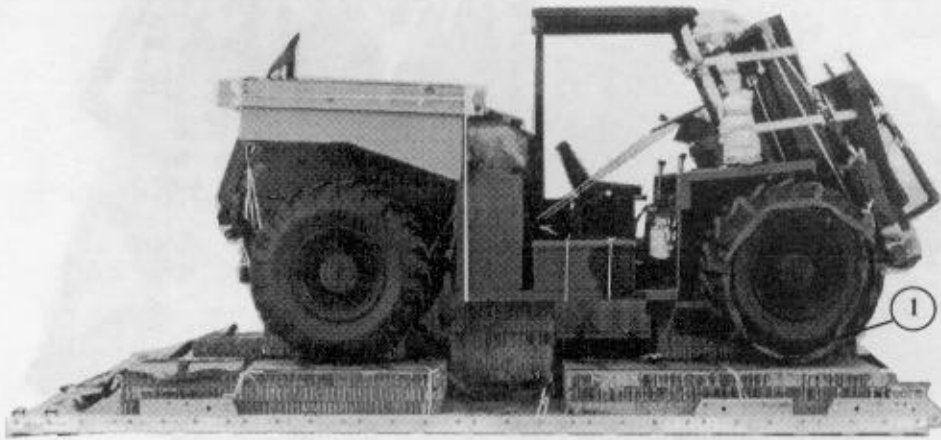


- ① Lay the running end of each drive-off aid under the front wheels. Holding the drive-off aid against the wheel, turn the right wheel counterclockwise until the drive-off aids are under slight tension. Repeat for the left side turning the wheel clockwise.
- ② Tie the end loop of drive-off aid to the nearest cross piece with a double length of type I, 1/4-inch cotton webbing.
- ③ Secure drive-off aids to convenient points on the platform using type I, 1/4-inch cotton webbing.

Figure 5-27. Drive-off aids installed

5-7. Positioning Forklift

Position the forklift on the platform as shown and described in *Figure 5-28*.

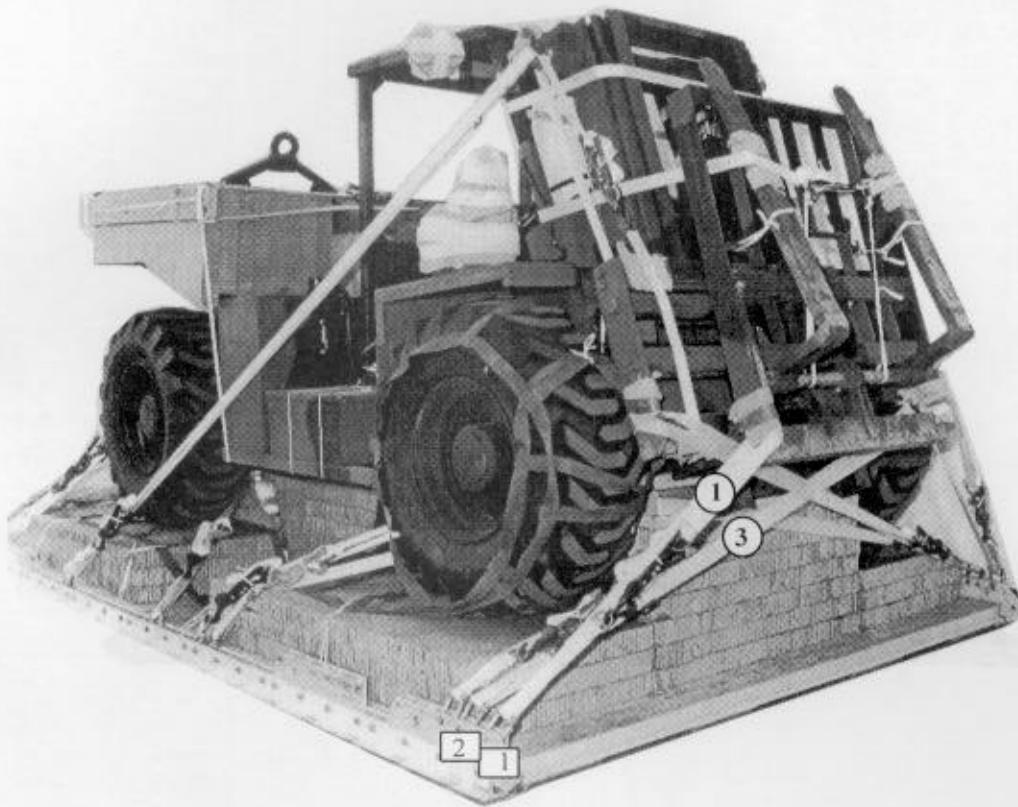


- ① Position the forklift on the platform with the center of the front wheel 24 inches from the front edge of the platform.
- ② Remove lifting slings and clevises (Not shown).
- ③ Tie the load spreaders to the bottom of the forklift securing them to convenient points on the vehicle using the 1/2-inch tubular nylon webbing prepositioned on the load spreaders (Not shown).

Figure 5-28. Forklift positioned on platform

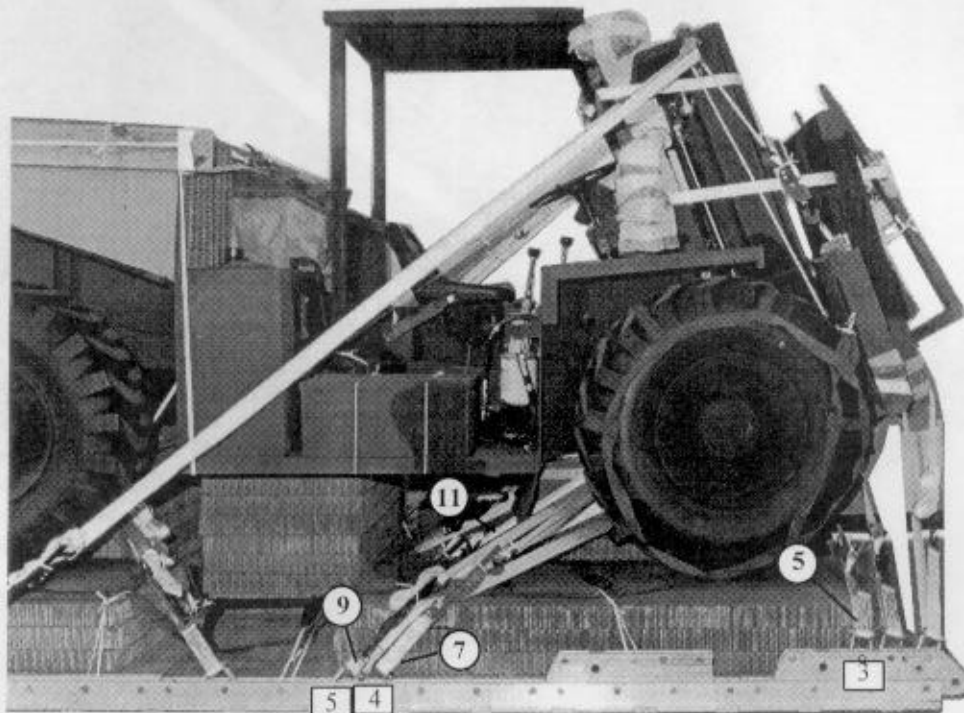
5-8. Lashing Forklift

Lash the forklift to the platform using twenty-six 15-foot tie-down assemblies. Install the lashings according to FM 10-500-2/TO 13C7-1-5 and as shown in *Figures 5-29 through 5-32*.



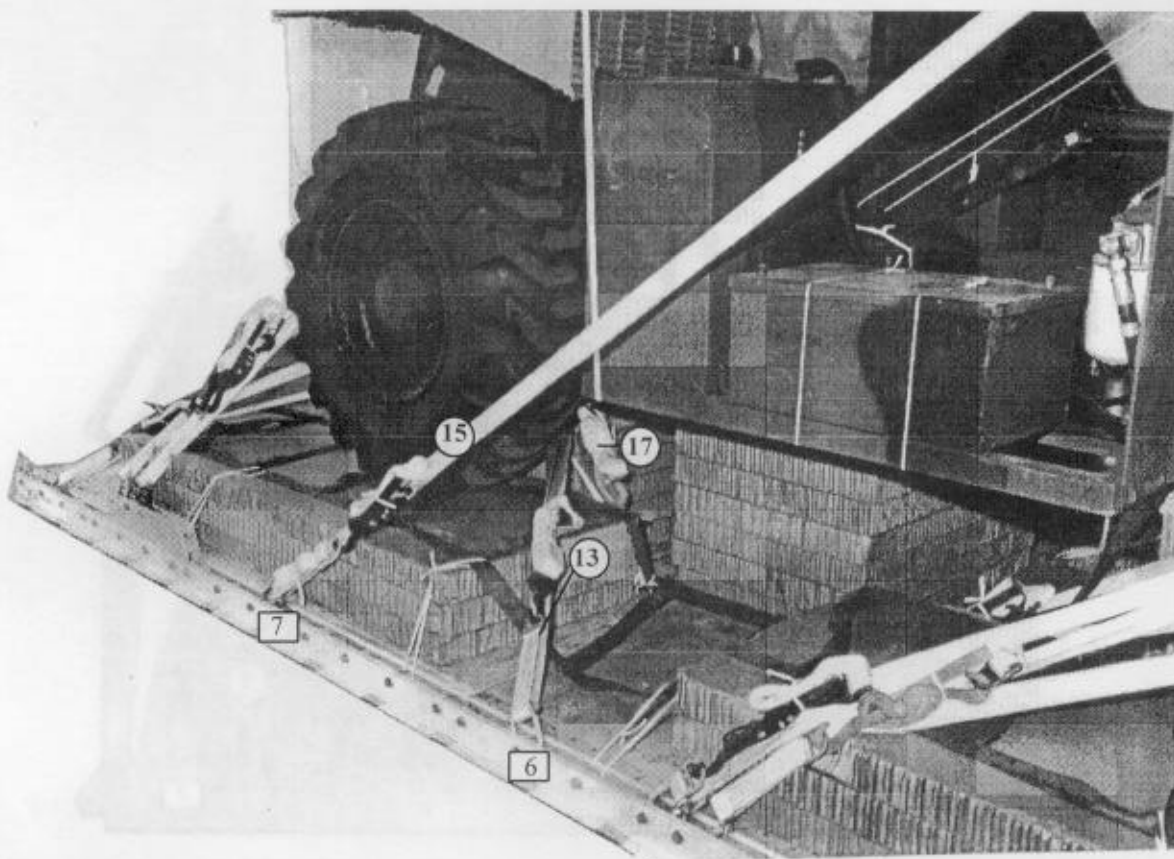
| LASHING NUMBER | CLEVIS NUMBER | INSTRUCTIONS |
|-------------------|------------------|--------------------------------|
| | | Pass lashing: |
| 1 | 1 | To fork's right side. |
| 2 | 1A | To fork's left side. |
| 3 | 2 | To fork's carriage left side |
| 4 | 3 | To fork's carriage right side. |

Figure 5-29. Lashings 1 through 4 secured



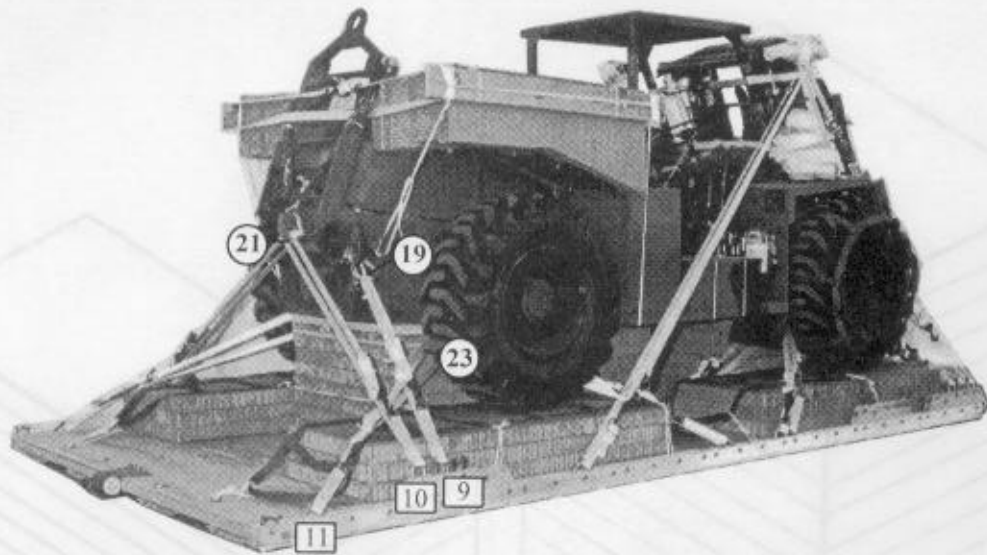
| LASHING NUMBER | CLEVIS NUMBER | INSTRUCTIONS |
|-------------------|------------------|--------------------------------|
| | | Pass lashing: |
| 5 | 3 | To front axle ring left side. |
| 6 | 3A | To front axle ring right side. |
| 7 | 4 | To front axle right side. |
| 8 | 4A | To front axle left side. |
| 9 | 5 | To front axle right side. |
| 10 | 5A | To front axle left side. |
| 11 | A4 | To front axle right side. |
| 12 | B4 | To front axle left side. |

Figure 5-30. Lashings 5 through 12 secured



| LASHING NUMBER | CLEVIS NUMBER | INSTRUCTIONS |
|-------------------|------------------|---|
| | | Pass lashing: |
| | | Note: *30-foot lashings. |
| 13 | 6 | To rear axle right side. |
| 14 | 6A | To rear axle left side. |
| *15 | 7 | To top lifting ring on fork's right side. |
| *16 | 7A | To top lifting ring on fork's left side. |
| 17 | A5 | To rear axle right side. |
| 18 | B5 | To rear axle left side. |

Figure 5-31. Lashings 13 through 18 secured



| LASHING NUMBER | CLEVIS NUMBER | INSTRUCTIONS |
|-------------------|------------------|---|
| | | Pass lashing: |
| 19 | 9 | To a medium clevis attached to right rear tie down point. |
| 20 | 9A | To a medium clevis attached to left rear tie down point. |
| 21 | 10 | To towing pintle. |
| 22 | 10A | To towing pintle. |
| 23 | 11 | To rear axle right side. |
| 24 | 11A | To rear axle left side. |

Figure 5-32. Lashings 19 through 24 secured

5-9. Building and Positioning Parachute Stowage Platform

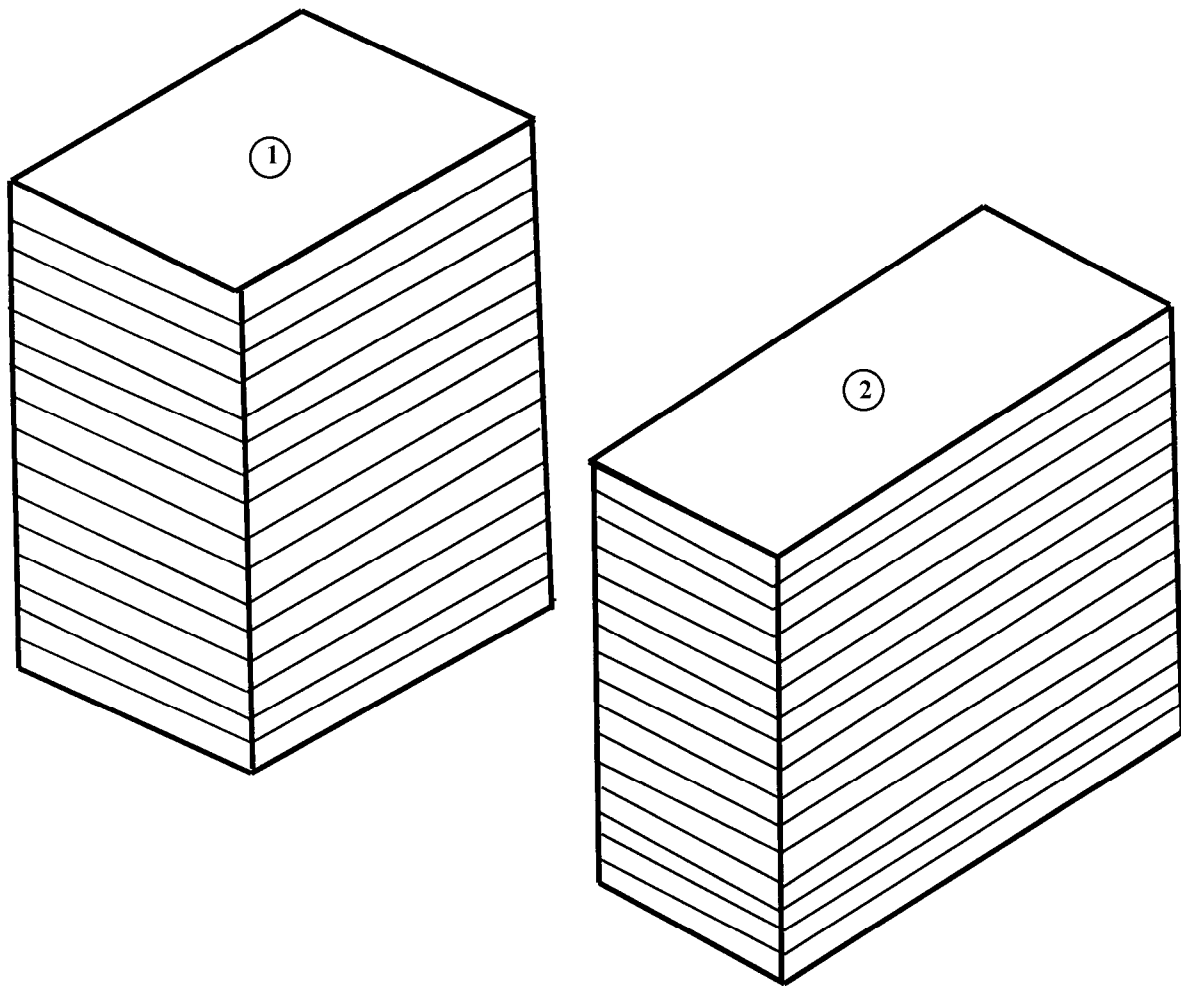
Build and position the parachute stowage platform as described below.

a. Build the honeycomb support stacks as shown in *Figure 5-33*.

b. Build a parachute stowage platform as shown in *Figure 5-34*.

c. Position the honeycomb support and parachute stowage platform. Lash the parachute stowage platform as shown in *Figure 5-35*.

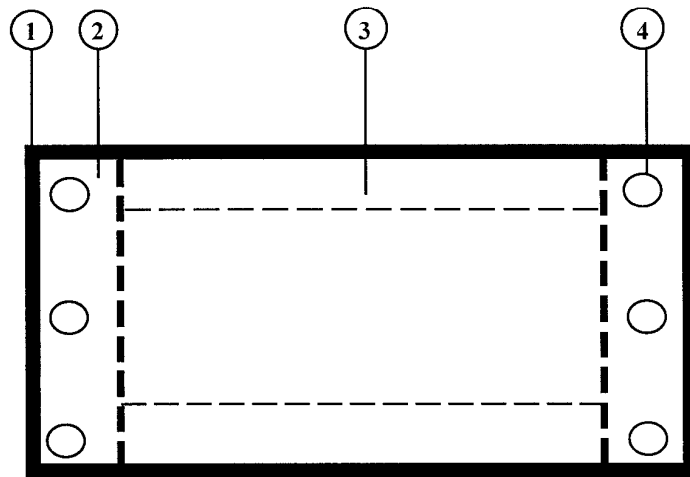
- Notes:
1. This drawing is not drawn to scale.
 2. All measurements are given in inches.



- ① Build two honeycomb support stacks by gluing sixteen 15- by 15-inch pieces of honeycomb together in each stack.
- ② Build a third honeycomb support stack by gluing sixteen 15-by 36-inch pieces of honeycomb together.

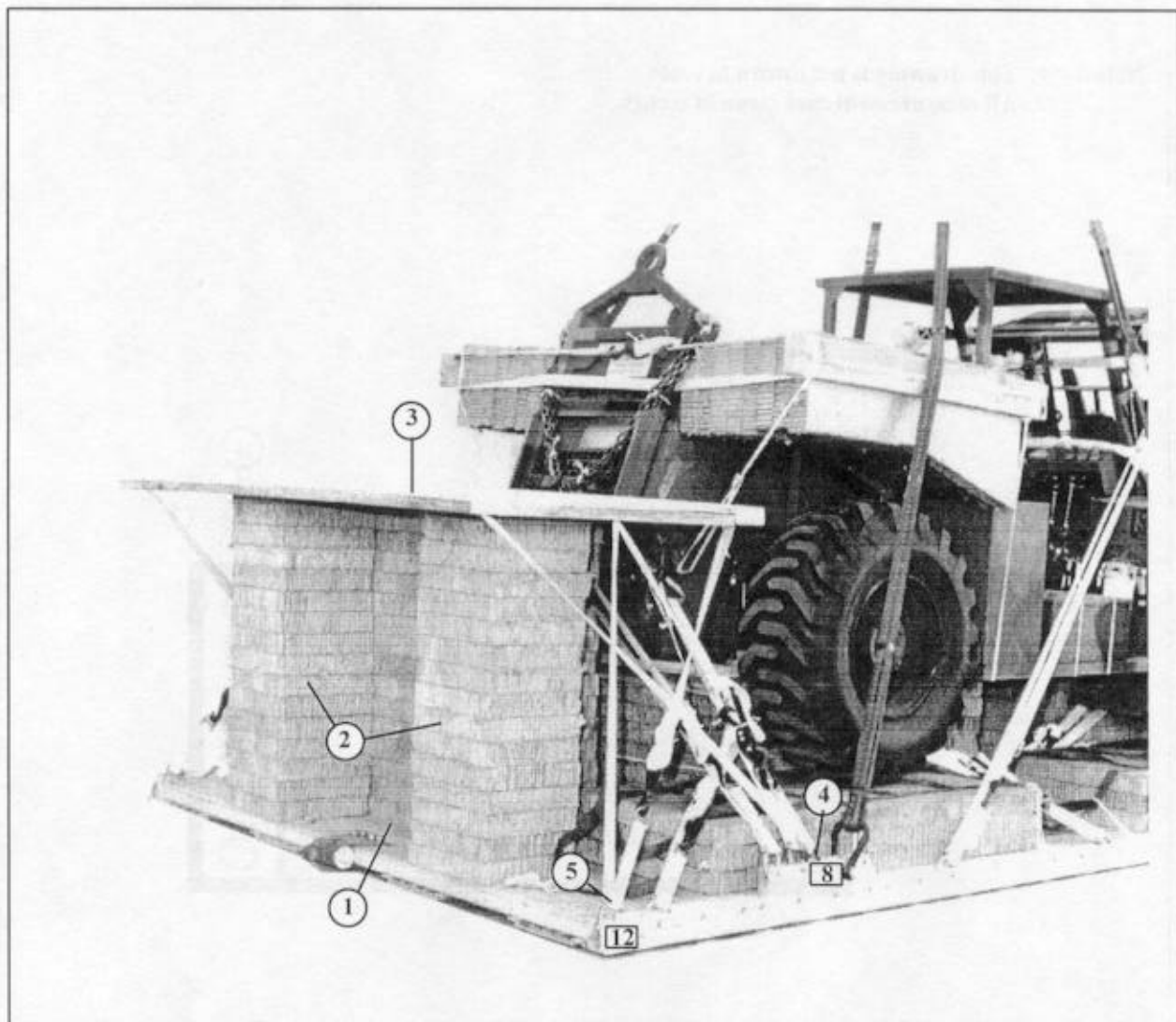
Figure 5-33. Honeycomb support built

- Notes: 1. This drawing is not drawn to scale.
2. All measurements are given in inches.



- ① Cut a 3/4- by 48- by 82-inch piece of plywood.
- ② Cut two 2- by 6- by 48-inch pieces of lumber. Place each piece flush at each end of the plywood and secure with 10d nails.
- ③ Cut two 2- by 6- by 71-inch pieces of lumber. Place each piece flush at each side of the plywood and flush against the 2- by 6- by 48-inch pieces of lumber. Secure with 10d nails.
- ④ Drill six 2 inch holes as shown.

Figure 5-34. Detail of parachute stowage platform built

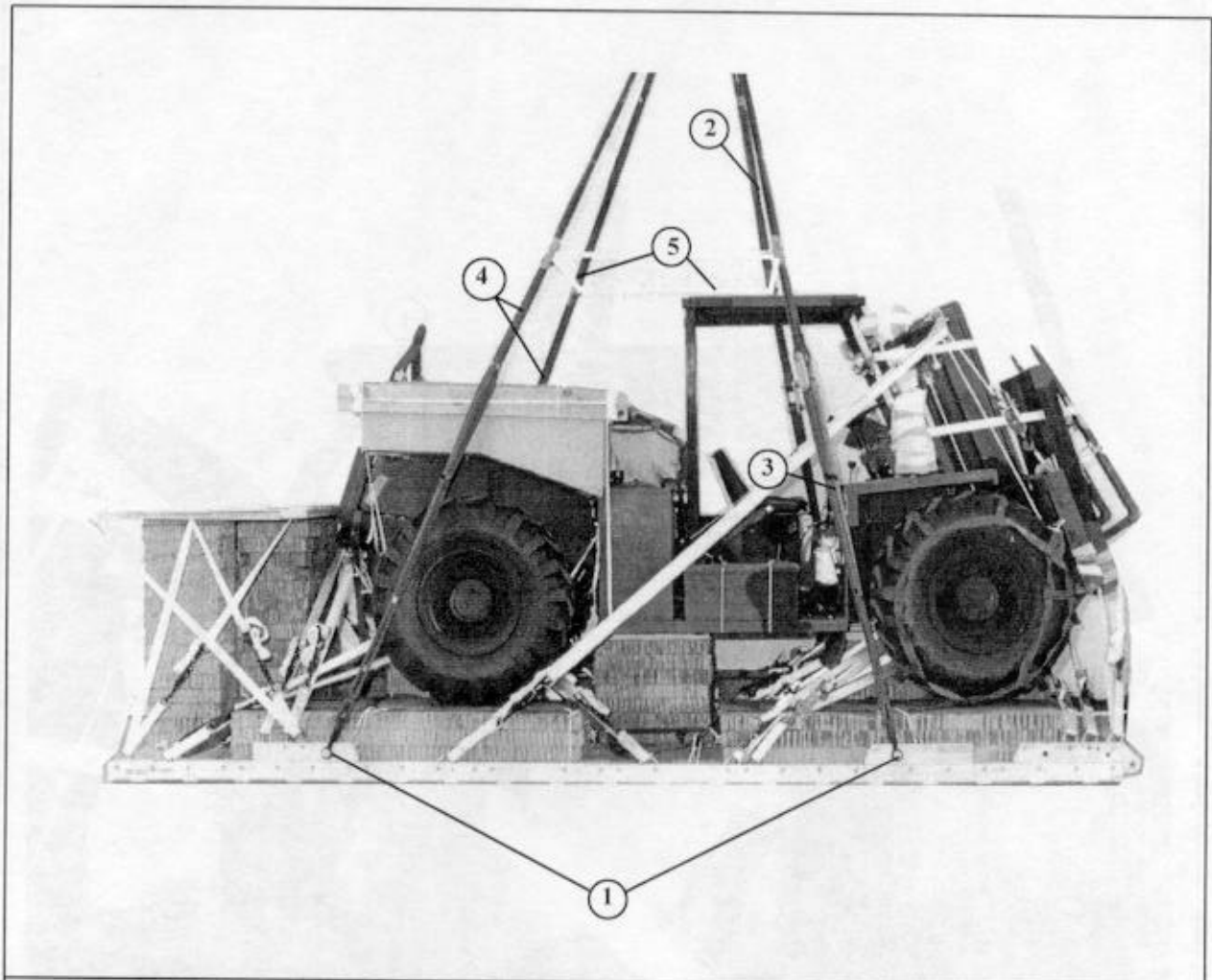


- ① Position honeycomb support 15 inches and centered from the rear of the platform.
- ② Position honeycomb supports flush with rear of the platform and 36 inches apart.
- ③ Position parachute stowage platform on top of honeycomb supports.
- ④ Pass a 15-foot lashing through clevis 8 and up through the right rear parachute stowage platform hole and down through the center right parachute stowage platform hole. Secure the ends with a D-ring and load binder.
- ⑤ Pass a 15-foot lashing through clevis 12 and up through the right center parachute stowage platform hole and down through the right front parachute stowage platform hole. Secure the ends with a D-ring and load binder.
- ⑥ Repeat steps 4 and 5 for the left side of load using clevises 8A and 12A (not shown).

Figure 5-35. Positioning and securing parachute stowage platform

5-10. Installing Suspension Slings and Deadman's Tie

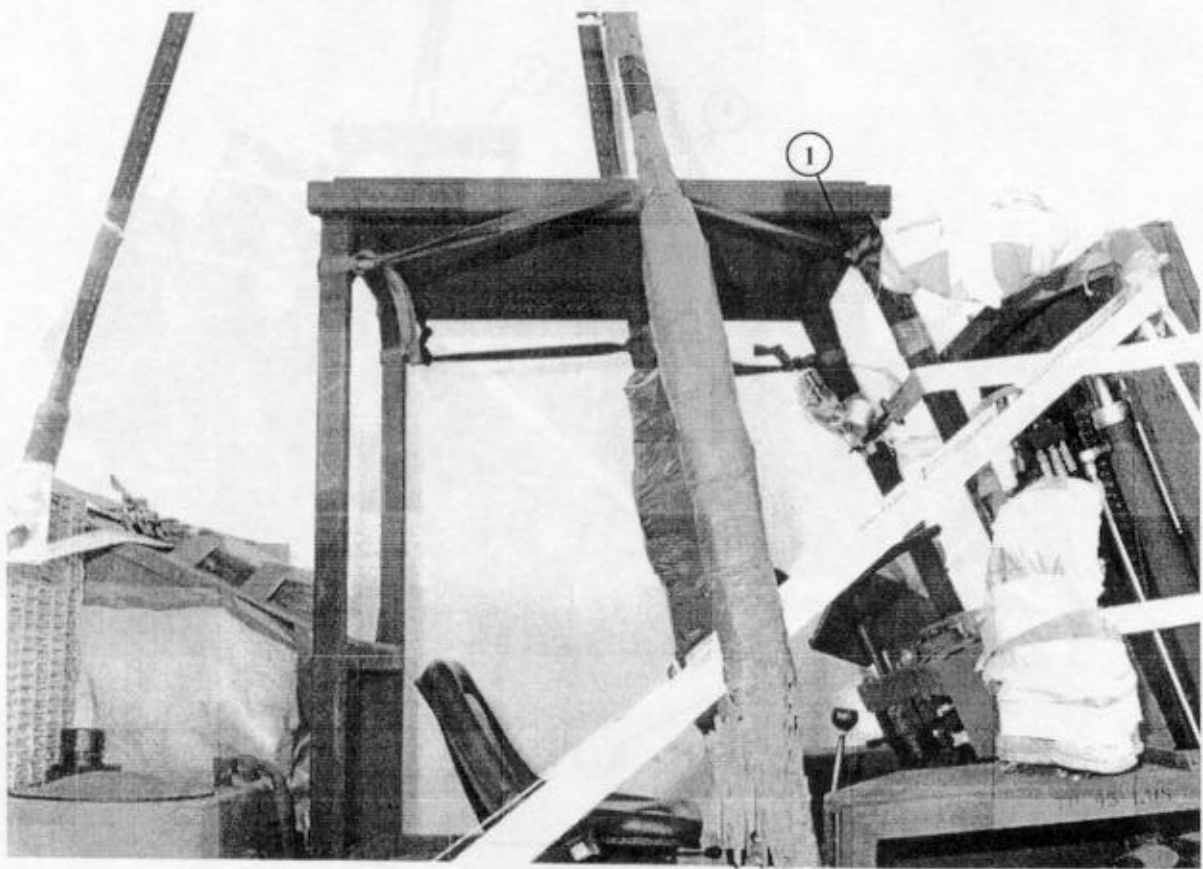
Install the suspension slings and deadman's tie as shown in *Figures 5-36 through 5-38*.



- ① Attach large clevises to the platform suspension links.
- ② Attach an 11-foot (2-loop), type XXVI nylon suspension sling to each front suspension link and half them through a 5.5-inch link. Attach the running end to the clevis.
- ③ Attach a 9-foot (4-loop), type XXVI nylon suspension sling to the end of the 5 1/2-inch link in step 2.
- ④ Attach a 16-foot (4-loop), type XXVI nylon suspension sling to each of the rear suspension links.
- ⑤ Raise the slings and install the deadman's tie according to FM 10-500-2/TO 13C7-1-5.

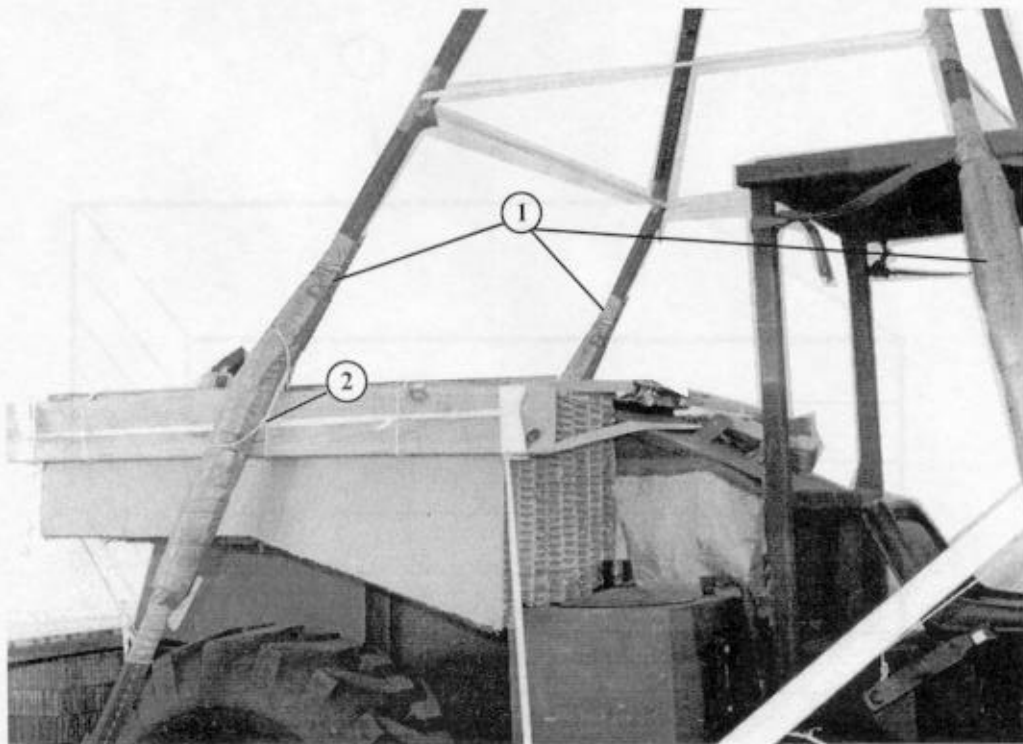
Figure 5-36. Suspension sling installed

Note: Do not safety tie to light brackets.



- ① With tension on slings, place a safety tie to each front slings using doubled 1-inch tubular nylon webbing and secure it to the driver's cab. **Do not safety tie to light brackets.**

Figure 5-37. Suspension sling safetied

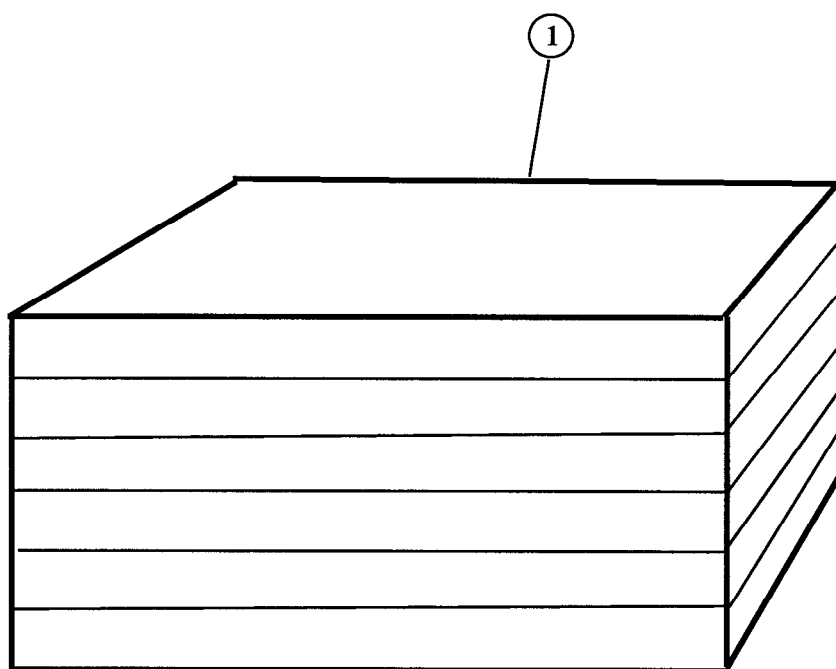


- ① Pad all four slings according to FM 10-500-2/TO 13C7-1-5. Ensure front suspension slings are padded 6 inches above the driver's cab and approximately 18 inches below the top of the front fenders.
- ② Safety tie the rear slings to the side of the lumber with type III nylon cord.

Figure 5-38. Suspension sling safetied

5-11. Building and Positioning Parachute Release Tray

Build a parachute release tray as shown in *Figure 5-39* and position the parachute release tray as shown in *Figure 5-40*.



- ① Cut and glue six pieces of 28-inch by 48-inch honeycomb together.

Figure 5-39. Parachute release tray build

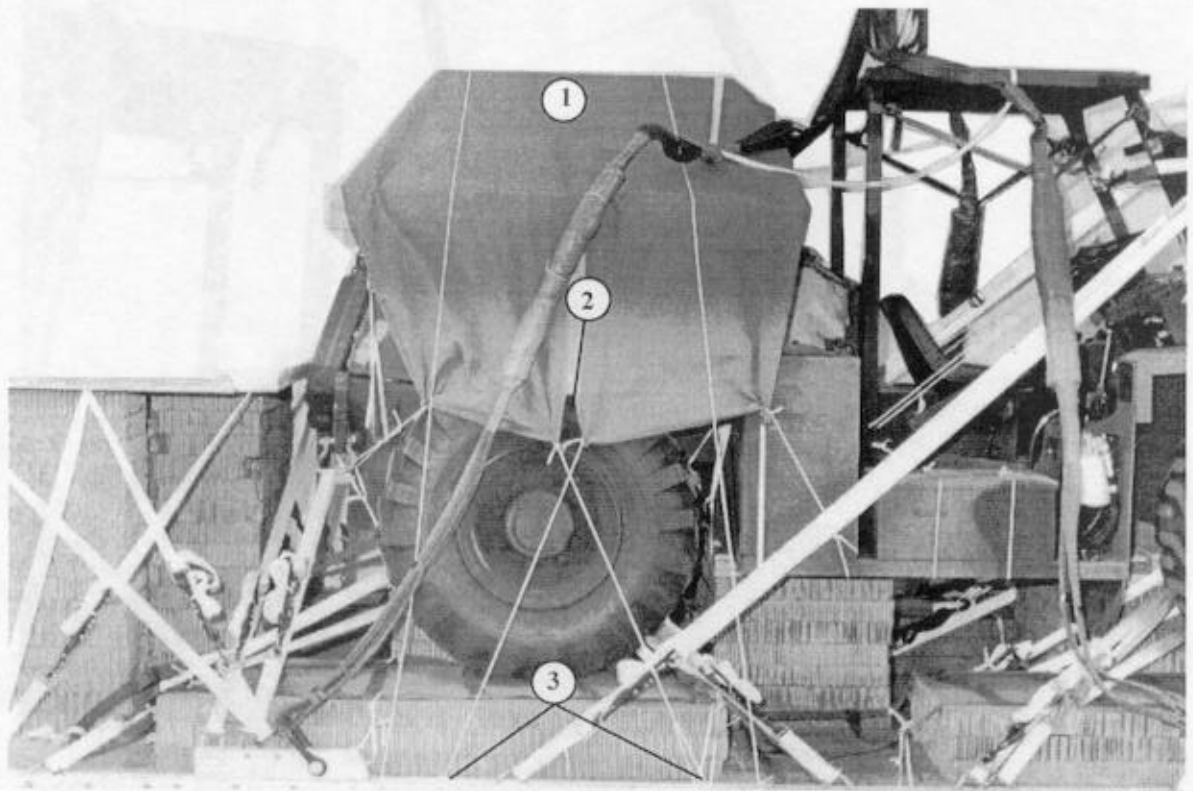


- ① Position the honeycomb stack on the forklift engine compartment and secure in place with type III nylon cord to convenient points.

Figure 5-40. Parachute release tray positioned

5-12. Positioning Load Cover

Position a 12-foot canvas load cover over the parachute release tray as shown in *Figure 5-41*.

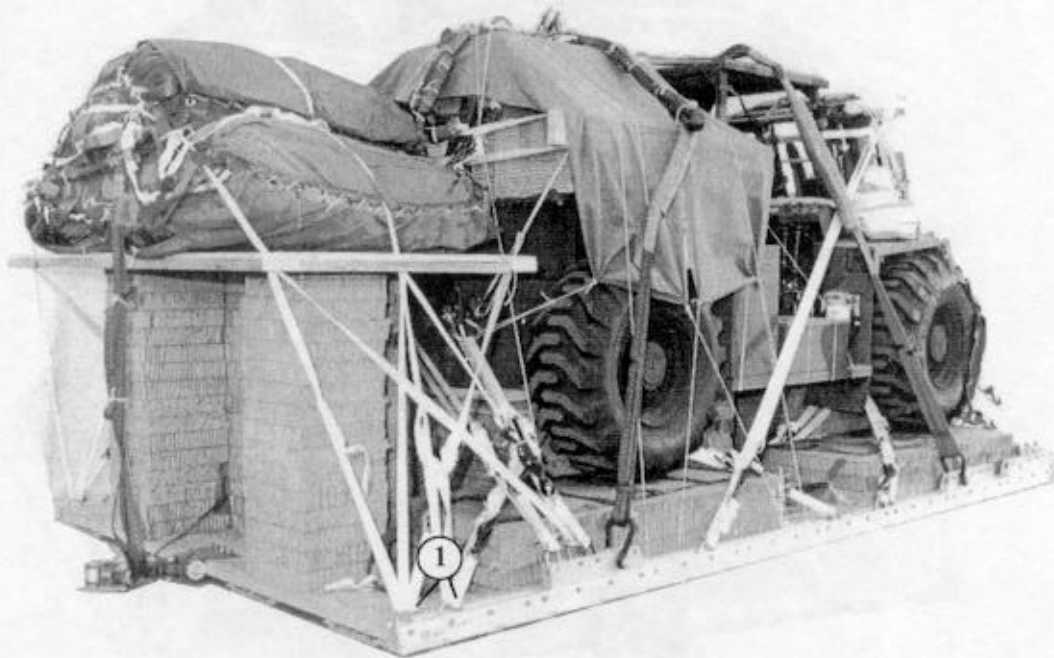


- ① Position a 12-foot canvas load cover over the honeycomb.
- ② Cut the side to allow for the safety tie of the rear slings.
- ③ Secure the cover in place with type III nylon cord tied to convenient points on the load.

Figure 5-41. Parachute release tray covered

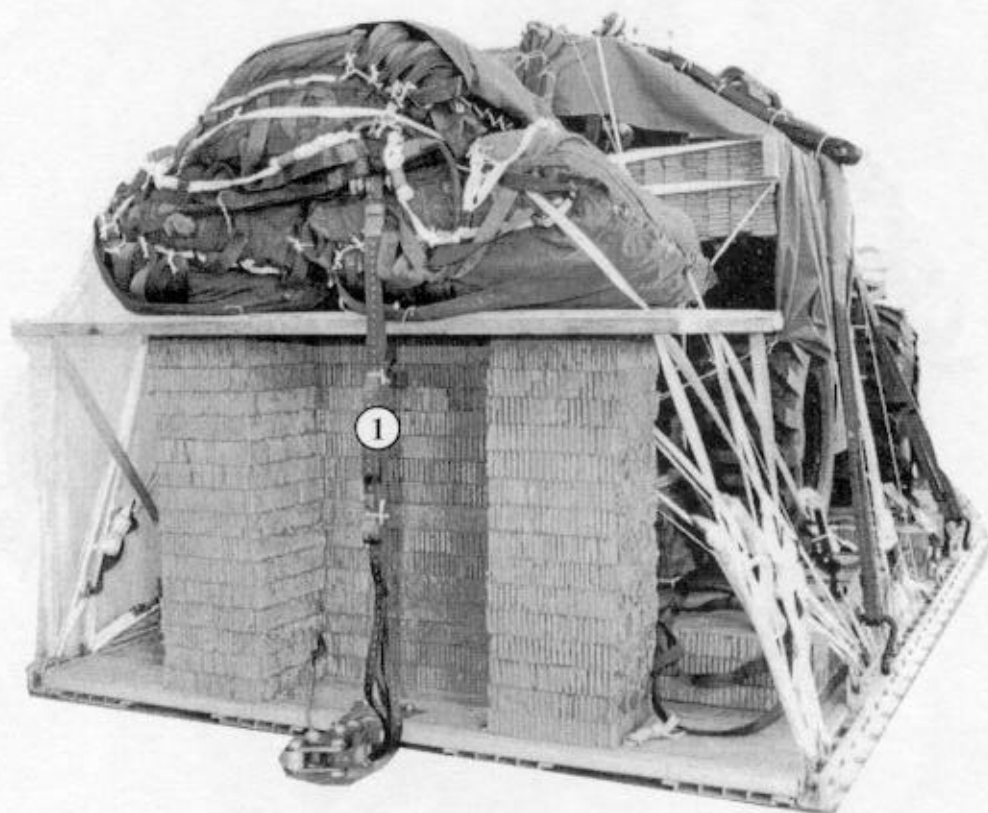
5-13. Stowing Cargo Parachute

Prepare, stow and restrain three G-11 cargo parachutes on the parachute stowage platform according to FM 10-500-2/TO 13C7-1-5 and as shown in *Figures 5-42 and 5-43*.



① Restrain the parachutes using platform clevises 11, 11A, 12, and 12A.

Figure 5-42. Cargo parachutes stowed

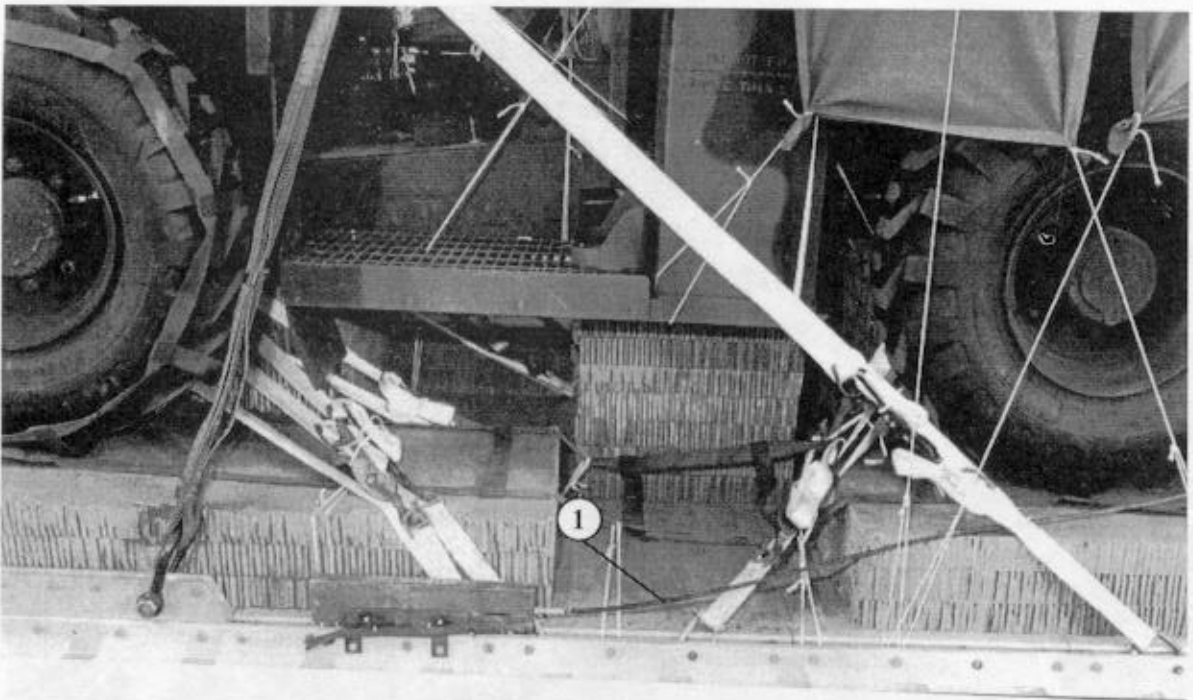


- ① Attach a 9-foot (2-loop), type XXVI nylon sling to be used as a deployment line.

Figure 5-43. Deployment line installed

5-14. Installing Extraction System

Install the extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in *Figure 5-44*.

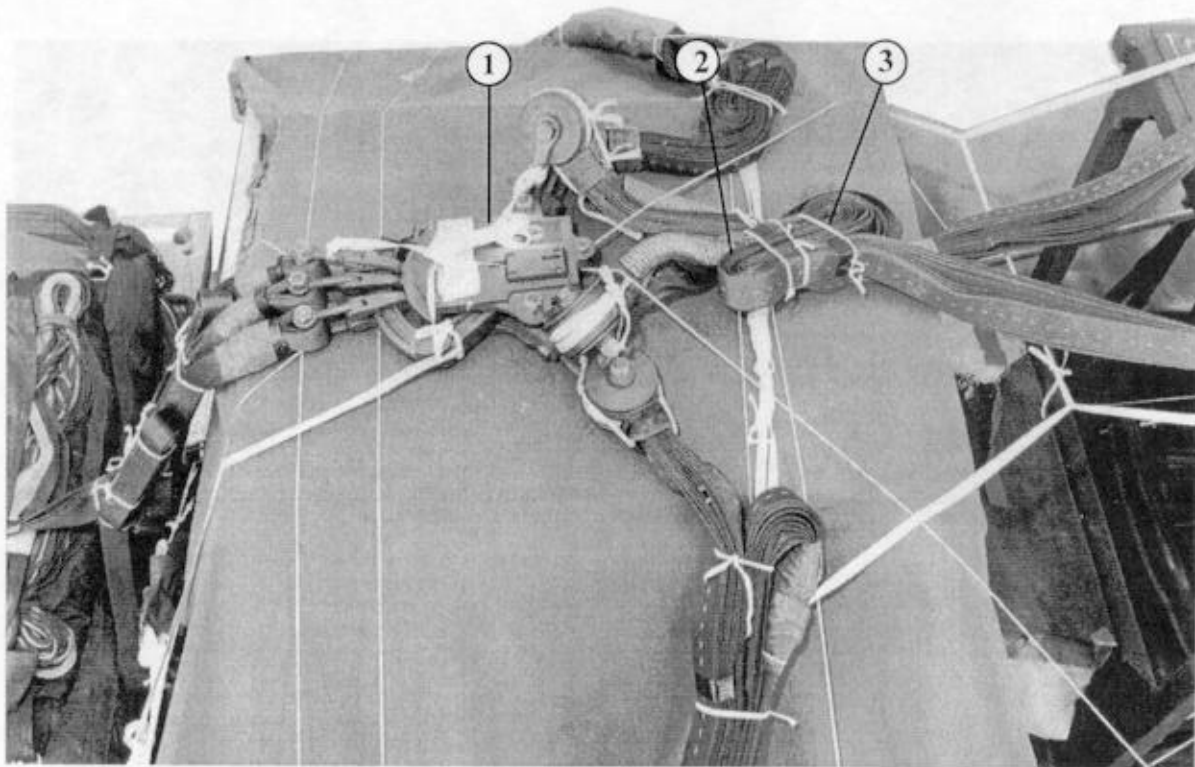


- ① Use a 12-foot EFTC cable and safety the cable to tie-down ring C8 using one turn type I, 1/4-inch cotton webbing.

Figure 5-44. EFTC extraction system installed

5-15. Installing Parachute Release

Prepare, attach, and safety an M-2 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in *Figure 5-45*.



- ① Place the M-2 release on top of the load cover and safety it to convenient points on load.
- ② Attach the suspension slings and parachute riser extensions according to FM 10-500-2/TO 13C7-1-5.
- ③ S-fold the excess suspension slings, and tie it with type I, 1/4-inch cotton webbing.

Figure 5-45. M-2 release installed

5-16. Placing Extraction Parachute

Select the extraction parachute and extraction line needed using the extraction line requirements table in FM 10-500-2/TO 13C7-1-5. Place the extraction line on the load for installation in the aircraft.

5-17. Installing Provisions for Emergency Restraints

Select and install the provisions for the emergency aft restraints according to the emergency aft restraint requirements table in FM 10-500-2/TO 13C7-1-5.

5-18. Marking Rigged Load

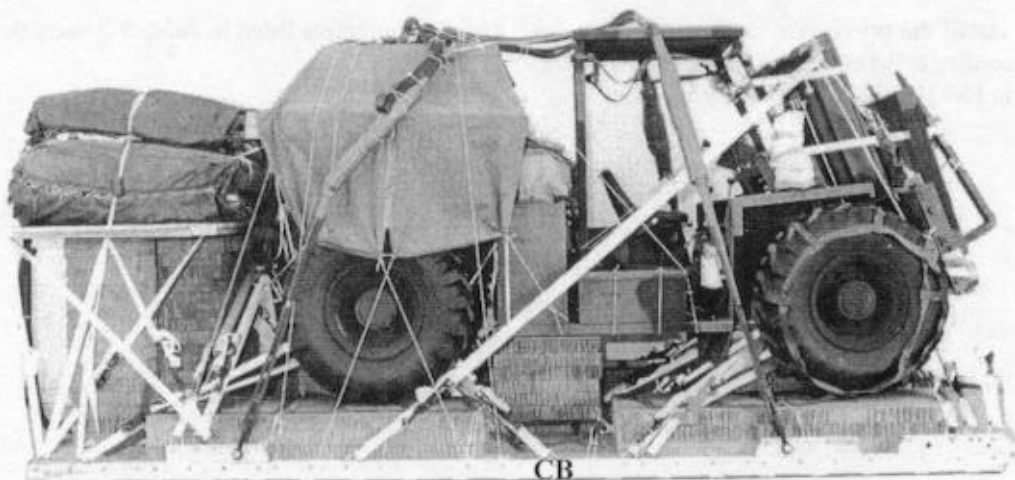
Mark the rigged load according to FM 10-500-2/ TO 13C7-1-5 and as shown in *Figure 5-46*. Complete Shipper's Declaration for Dangerous Goods and affix to load. If the load varies from the one shown, the weight, height, CB, tip off curve, and parachute requirements must be recomputed.

5-19. Equipment Required

Use the equipment listed in *Table 5-2* to rig this load.

CAUTION

Make the final rigger inspection required by FM 10-500-2/TO 13C7-1-5 before the load leaves the rigging site.

**RIGGED LOAD**

| | |
|--|---------------|
| Weight: Load shown | 15,400 pounds |
| Maximum weight | 15,600 pounds |
| Height | 98 1/2 inches |
| Width | 108 inches |
| Length | 226 inches |
| Overhang: Front | 15 inches |
| Rear | 16 inches |
| Center of balance (CB): From front edge of platform | 83 inches |
| Extraction system: Add 18 inches to length of platform | EFTC |

Figure 5-46. M271 4,000-pound capacity forklift truck rigged on a type V platform for low-velocity airdrop

Table 5-2. Equipment required for rigging the M271 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop

| National Stock Number | Item | Quantity |
|-----------------------|--|-------------|
| 8040-00-273-8713 | Adhesive, paste, 1 -gal | As required |
| 1670-00-568-0323 | Band, rubber, retainer | As required |
| | Clevis, suspension. | |
| 4030-00-678-8562 | 3/4-in (medium) | 2 |
| 4030-00-090-5354 | 1-in (large) | 8 |
| 4020-00-240-2146 | Cord, nylon, type III, 550-lb | As required |
| 1670-00-434-5783 | Coupling, airdrop, extraction force transfer w 12-ft cable | 1 |
| | Cover: | |
| 1670-00-360-0328 | Clevis, large | 3 |
| 1670-00-360-0329 | Link assembly (type IV) | 7 |
| 8135-00-664-6958 | Cushioning material, packaging, cellulose wadding | As required |
| 8305-00-958-3685 | Felt, 1/2-inch | As required |
| 1670-01-183-2678 | Left, extraction line | 2 |
| | Link assembly: | |
| | Two-point: | |
| 5306-00-435-8994 | Bolt, 1-in | 4 |
| 5310-00-232-5165 | Nut, 1-in | 4 |
| 1670-00-003-1954 | Plate, side, 5 1/2-in | 4 |
| 1670-00-783-5988 | Type IV | 7 |
| | Lumber: | |
| 5510-00-220-6146 | 2- by 4-in: | |
| | 22 1/2-in | 2 |
| | 32-in | 4 |
| | 37 1/2-in | 3 |
| 5510-00-220-6148 | 2- by 6-in: | |
| | 18-in | 2 |
| | 24-in | 4 |
| | 38-in | 2 |
| | 48-in | 2 |
| | 56-in | 2 |
| | 71-in | 2 |
| 5510-00-220-6274 | 4- by 4-in: | |
| | 10-in | 2 |
| | Nail, steel wire, common: | |
| 5315-00-010-4659 | 8d | As required |
| 5315-00-010-6611 | 10d | As required |
| | Pad, energy-dissipating, honeycomb, | |
| 1670-00-753-3928 | 3-by 36- by 96-in | 26 |
| | Parachute: | |
| | Cargo: | |
| 1670-01-016-7841 | G-11C | 3 |
| | Cargo extraction: | |
| 1670-00-687-5458 | 22-ft | 1 |
| | Platform, AD. type V, 16-ft: | |
| | Bracket: | |
| 1670-01-162-2375 | Inside EFTA | (1) |
| 1670-10-162-2374 | Outside EFTA | (1) |
| 1670-01-163-2372 | Clevis assembly | (24) |
| 1670-01-163-2376 | Extraction bracket assembly | (1) |
| 1670-01-243-2389 | Suspension link | (4) |

Table 5-2. Equipment required for rigging the M271 4,000-pound capacity forklift truck on a type V platform for low-velocity airdrop (continued)

| National Stock Number | Item | Quantity |
|-----------------------|--|-------------|
| 1670-01-163-2381 | Tandem link | (2) |
| 5530-00-129-7777 | Plywood: | (2) |
| 5530-00-128-4981 | 1/2-in: 38- by 4-in | |
| | 3/4-in: | |
| | 4- by 6-in | (1) |
| | 16- by 24-in | (1) |
| | 34- by 24-in | (2) |
| | 38- by 4-in | (1) |
| | 42- by 6-in | (1) |
| | 42- by 18-in | (2) |
| | 42- by 32-in | (1) |
| | 42- by 37 1/2-in | (2) |
| | 42- by 44-in | (2) |
| | 82- by 48-in | (1) |
| 1670-01-097-8817 | Release, cargo parachute, M-2 | 1 |
| | Sling, cargo airdrop: | |
| | For deployment: | |
| 1670-01-062-6304 | 9-ft (2-loop), type XXVI nylon webbing <i>or</i> | 1 |
| 1670-01-062-6305 | 9-ft (4-loop), type XXVI nylon webbing | 1 |
| | For extraction: | |
| 1670-01-062-6313 | 60-ft (3-loop), type XXVI nylon webbing (C-130 aircraft) | 1 |
| 1670-01-107-7651 | 140-ft (3-loop), type XXVI nylon webbing (C-141 aircraft) | 1 |
| | For lifting: | |
| 1670-01-062-6305 | 9-ft (4-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-6307 | 12-ft (4-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-6306 | 3-ft (4-loop), type XXVI nylon webbing | 1 |
| | For moving: | |
| 1670-01-062-6301 | 3-ft (2-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-6310 | 11-ft (4-loop), type XXVI nylon webbing | 2 |
| | For suspension: | |
| 1670-01-062-6305 | 9-ft (4-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-7760 | 11-ft (2-loop), type XXVI nylon webbing | 2 |
| 1670-01-062-6308 | 16-ft (4-loop), type XXVI nylon webbing | 2 |
| | For riser extensions: | |
| 1670-01-062-6302 | 20-ft (2-loop), type XXVI nylon webbing | 6 |
| | Strap: | |
| 1670-00-040-8219 | Parachute release, multi-cut with 3 knives | 2 |
| 7510-00-266-5016 | Tape, masking, 2-in | As required |
| 1670-00-937-0271 | Tie-down assembly, 15-ft | 36 |
| 1670-00-431-8486 | Vehicle drive-off aids | 1 |
| | Webbing: | |
| 8305-00-268-2411 | Cotton, 1/4-inch, type I | As required |
| | Nylon: | |
| | Tubular: | |
| 8305-00-082-5752 | 1/2-in, natural <i>or</i> | As required |
| 8305-00-268-2453 | 1/2-in, olive drab | As required |

GLOSSARY

| | | | |
|-------------|------------------------------------|---------------|--|
| ACB | attitude control bar | gal | gallon |
| AD | Airdrop | HQ | headquarters |
| AFB | Air Force base | in | inch |
| AFR | Air Force regulation | K | thousand |
| AFTO | Air Force Technical Order | LAPE | low-altitude parachute-extraction |
| ALC | Airlift Logistics Center | LAPES | low-altitude parachute-extraction system |
| attn | attention | lb | pound |
| C | change | no | number |
| CB | center of balance | psi | pounds per square inch |
| d | penny | ROPS | roll-over protection structure |
| DA | Department of the Army | TM | technical manual |
| DC | District of Columbia | TO | technical order |
| DD | Department of Defense | TRADOC | United States Army Training and Doctrine Command |
| diam | diameter | US | United States |
| ea | each | VA | Virginia |
| EFTA | extraction force transfer actuator | w | with |
| EFTC | extraction force transfer coupling | yd | yard |
| FM | field manual | | |
| ft | feet/foot | | |

REFERENCES

These documents must be available to the intended users of this publication.

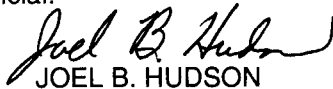
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| AFTO Form 22 | <i>Technical Order Publications Improvement Report. April 1973</i> |
| DA Form 2028 | <i>Recommended Changes to Publications and Blank Forms. February 1974</i> |
| **Shipper's Declaration for Dangerous Goods | <i>Locally Procured Form</i> |
| DD Form 1748 Series | <i>Joint Airdrop Inspection Record</i> |

*AFJMAN 24-204/TM 38-250 has superseded AFR 71-4/TM 38-250 (15 January 1988). Change 2 reflects this change. The basic manual and Change 1 still reference the superseded publication. You may wish to make pen and ink changes to update the old reference citations accordingly.

** Shipper's Declaration for Dangerous Goods has superseded DD Form 1387-2 (February 1982). Change 2 reflects this change. The basic manual and Change 1 still reference the superseded publication. You may wish to make pen and ink changes to up date the old reference citations accordingly.

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